

← WEEK
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BUSINESS WEEK

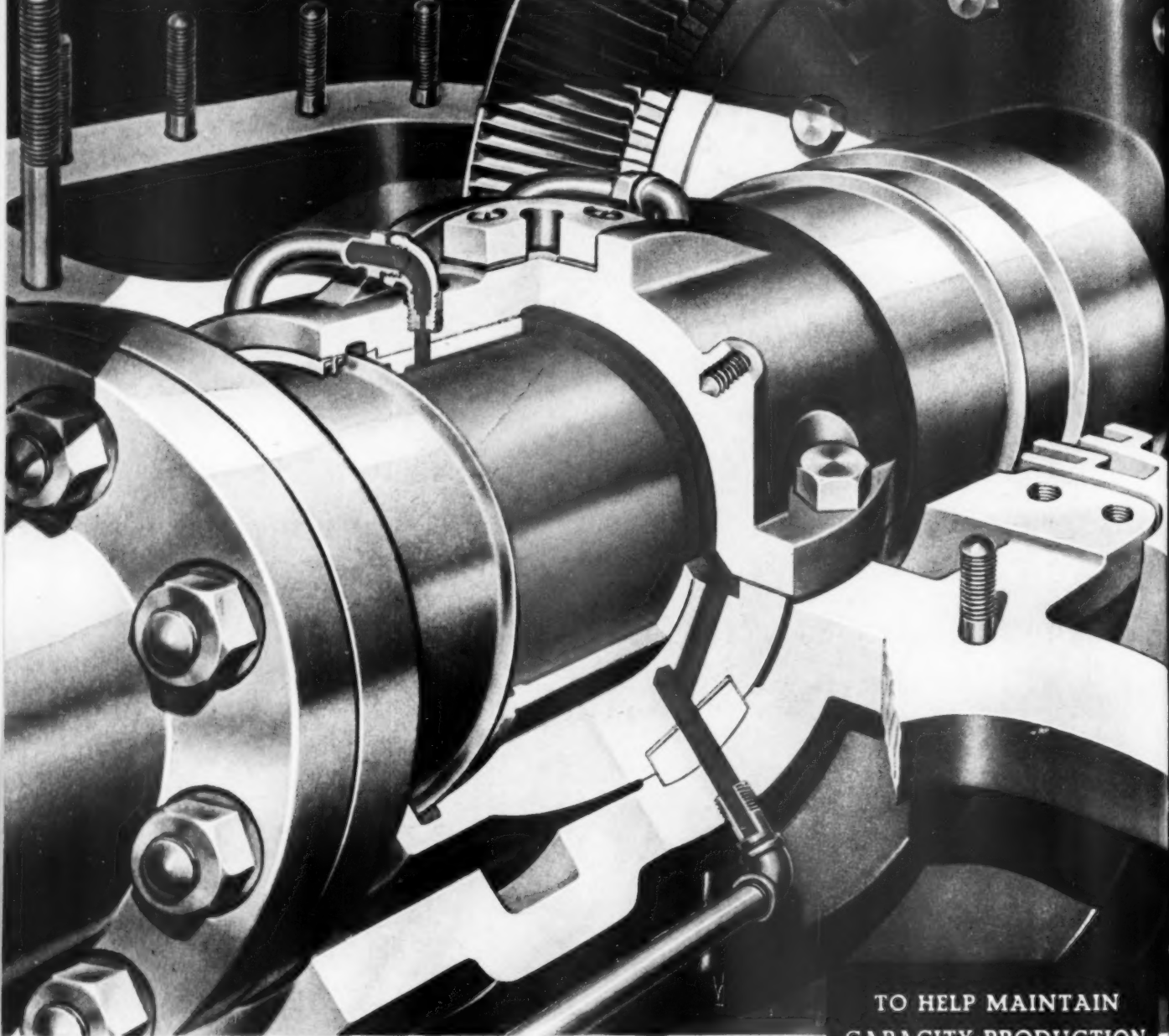


Resort business on the march as the Army takes over, at Atlantic City, another batch of the nation's hotels.

ESS

PUBLISHED BY THE MCGRAW-HILL PUBLISHING COMPANY, INC. • TWENTY CENTS

Floating 10 Tons of Steel on 3 Ounces of Oil



THAT PATCH OF RED in the picture above is just as important today as bombsights, guns and depth charges.

It shows where *oil* protects a machine that generates power for U. S. industry.

That shaft in the picture shoulders one end of a ten-ton rotor, whirling at incredible speed inside a steam turbine. A thin film of oil must literally *float* that shaft to keep it turning.

Without *any* oil the turbine is worthless. With *ordinary* oil it might be seriously handicapped. But with the *right*

oil it is one of our mightiest weapons.

Socony-Vacuum created the *first* special oil for steam turbines. And today, more than half the major-sized turbines in the U. S. A. are lubricated with Gargoyle oils. Just one more example of how "Correct Lubrication" is helping Uncle Sam produce for victory.

SOCONY-VACUUM OIL CO., INC.—Standard Oil of New York Div. • White Star Div. Lubrite Div. • Chicago Div. • White Eagle Div. • Wadhams Div. • Southeastern Div. (Baltimore) • Magnolia Petroleum Company General Petroleum Corp. of California.

TO HELP MAINTAIN
CAPACITY PRODUCTION

CALL IN

SOCONY- VACUUM



*for Correct
Lubrication*



Here comes the \$64 Question!

Are you ready?

What is it, that is now so new and precious, yet after the war you will wear it—walk on it—ride on it—and use it in a dozen different ways, a dozen times a day—every day of your life?

Come on now, that ought to be easy for you folks who are laying up cars, and searching for old floor mats, bathing caps, nursery nipples.

Rubber! That's right

—but it will be a synthetic rubber, made in America, by Americans, for Americans—a rubber made from ingredients produced within the boundaries of the United States. Basic domestic materials now produce Hycar synthetic rubber that will wear longer.

Right now, thousands of tons of Hycar butadiene rubber are being produced. This Hycar is being processed into literally millions of parts that go into planes, ships, jeeps, and the most vital essentials of war.

After Victory, Hycar synthetic rubbers will continue to replace tree rubber in scores of applications, to make *better* articles for industrial and domestic use, and make America a better place in which to live.

Hycar crude synthetic rubbers are furnished to manufacturers of finished rubber products. Your rubber supplier can explain the superior qualities of Hycar. If you are making a war essential, our research laboratories and engineers will gladly cooperate to speed production and determine the best type of Hycar for your particular application. Hycar Chemical Company, Akron, Ohio.

RESEARCH • ENGINEERING • PRODUCTION

HYCAR *Synthetic Rubber*

LARGEST INDEPENDENT PRODUCER IN AMERICA OF BUTADIENE SYNTHETIC RUBBER

Business Week • July 18, 1942



**MECHANICAL
RUBBER**

In Essential Industries

Petroleum

—source of gasoline, lubricating oils and its many other refined counterparts—has become, literally, one of the most vital instruments of modern, mechanized warfare . . . both to industry at home and the forces at our far-flung battle fronts. And drilling for, pumping and refining, even transporting this petroleum, are phases of still another essential industry requiring the services of mechanical rubber products. Mechanical rubber equipment for the Petroleum Industry includes such items as giant rotary hose for deep well drilling, rugged transmission belts for pumping operations, steam hose for flue still cleaning in refineries, special heat-resisting conveyor belts to handle hot fuller's earth or bauxite used in refineries, and oil suction and discharge hose for loading or unloading cargoes from tankers or barges. Here is found one of the most obvious examples of the importance of mechanical rubber to industry in general, in peace or at war. Republic is now, and has been for over forty years, concerned exclusively with the specialized manufacture of rubber products for industry. **REPUBLIC RUBBER DIVISION OF LEE RUBBER AND TIRE CORPORATION, YOUNGSTOWN, OHIO.**



Recognition, by government and industry alike, of the valuable services performed by the Industrial Distributor has given him an active place in the war economy. Leading representative of his field is the Republic Distributor who displays the familiar emblem here illustrated. Take full advantage of his facilities on your mechanical rubber and other equipment needs.

REPUBLIC

HOSE • BELTING • PACKING • MOLDED GOODS • EXTRUDED PRODUCTS



RUBBER

BUSINESS WEEK and The ANNALIST

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A McGRAW-HILL PUBLICATION

WASHINGTON BULLETIN

WHAT THE WASHINGTON NEWS MEANS TO MANAGEMENT

Supplies—Crux of the Problem

Material supply is what's behind nearly every important war production move these days. It is at the root of current tension between Army and WPB.

The issue came to a head during the WPB reorganization, but actually had only a more or less accidental connection with the mechanics of that shift.

The reorganization (BW-July 11 '42, p14) reflects two facts: (1) Regulation of material flow is the key war-production job. (2) The needs of the United Nations rather than just the United States will dictate that regulation, despite opposition of the Army which, with a natural and perhaps laudable parochialism, thinks in terms of the strongest possible U. S. military force.

Army Focus on U. S. Needs

Army officials bitterly resent the necessity of debasing armament standards to save materials—such suggested moves as the elimination of rubber from tank treads. They resent the possibility of delays that arise from forcing war plants to operate on hand-to-mouth inventories. They feel that, before such drastic steps are taken, there should be deep cuts in the large shipments of materials to Britain and Russia and in the continued allocation of material to nonmilitary uses.

• **Civilian Security**—This last does not imply a dispute over material for ordinary consumer goods. That issue is settled. You won't get any copper ash trays out of the Nelson victory. You do get assurance that, for a while at least, materials will be provided to keep such basic things as the transportation and utility systems in good running order.

Green Light from Roosevelt

Faced with military lack of confidence in his policies and with some lack of co-operation, Nelson went to the White House. He came away with an assurance of continued presidential support—an assurance that took concrete form in an "OK—F. D. R." on the draft of the reorganization plan.

Nelson didn't press his advantage to the limit. He decided only a few hours before announcing the reorganization not to push through the merger of the Army and Navy Munitions Board with WPB, which had been a hot point in preliminary discussion.

ANMB has exercised broad priority powers (technically, assigned to it by

Nelson) which Nelson had wanted to concentrate in WPB. He is now trying to soothe the services by leaving them the name if not the substance of the munitions board.

A curtailed board will probably be given the job of settling issues between Army and Navy, of coordinating their activities, but will no longer be able to enforce its demands for critical materials without reference to competing essential demands.

How Functions Are Divided

Handling of the ANMB problem is part of Nelson's general plan for division of functions between WPB and the services. Technical operating problems involving the interests of one particular service are the province of that service. Problems encompassing the whole war effort or many phases of it rest with the WPB. Thus, the distribution of steel plate is a job for WPB. But the Army itself decides between using the plate in tanks or in scout cars.

Similarly, the machine tool problem, which cuts across all production and in which everyone has had a finger, will be pulled entirely into WPB in an expanded machine tool unit which is to have entire responsibility for estimating need, handling pool purchases of tools, overseeing production, and distributing tools. The services would be limited to furnishing information on their requirements.

• **Guarantee of Maintenance**—The Nelson victory is good news for businessmen, who will welcome reassurance that the nation's production machine will keep getting the essential minimum of maintenance. But this is not an irrevocable decision. The services have not yet said uncle. They will fight on specific issues. And Army officials still plan to go to the President with the argument that Nelson's priorities system is inefficient and is responsible for materials shortages.

Little Steel Compromise

NWLB's Little Steel decision is a clear indication that present machinery won't achieve wage stabilization. Only positive White House action now can prevent a steady upward movement of wages, pushing prices ahead of it. Existence of NWLB has slowed the upsurge of wages but there is no ceiling in sight.

In explaining the award of 5½¢ an hour (44¢ a day) the board said that

one of the factors considered was the fact that the cases were certified to it prior to the President's anti-inflation message of April 27; numerous other cases still pending before the board are in the same category.

The wage award was granted by a vote of 8 to 4 with the labor members dissenting. Also by a vote of 8 to 4, with the employer members dissenting, the award grants union maintenance of membership plus a checkoff of union dues. (Union members have 15 days from date of award to resign from the union if they wish.) The wage increase is retroactive to February.

Different Tax Philosophies

There will be another tax bill next year. Taxes will go up again, whether the job being done by Congress this year (page 17) makes it necessary to start from scratch or whether Congress adopts Senator George's suggestion that this year's bill should be drafted as the basic frame of wartime taxation, a frame on which to hang progressive rate hikes whenever more revenue is wanted.

The joker in George's proposal is that Congress might pass the basic bill now—before election—hike the rates after the elections, thus delivering the old one-two punch before next March 15. • **Forced Savings**—George's idea, however, is that we might as well introduce compulsory savings (page 15), a sales tax—or both—now rather than wait till later.

Public Hears Rubber Row

The fight over synthetic rubber is being fought out in the public eye in terms of rubber for civilians. Proponent of each process hints that if he gets the job the public will get tires.

Latest example is the Houdry Corp. advertising campaign in New York and Washington papers asserting that the government is sabotaging the American jalopy. This week background of the campaign became clearer when Arthur E. Pew, Jr., vice president of Houdry and also of Sun Oil Co., charged before Gillette's Senate Agriculture subcommittee that the Rubber Reserve Corp. had taken the process away from Sun and assigned it to Phillips Petroleum for investigation.

200,000 Tons of Rubber

While Donald Nelson defended WPB's synthetic rubber program—largely on the ground that, whatever its



THE 3 SABOTEURS!

Sales Representatives

(under "Flametoll"
as product name)

WILLIAM L. BARRELL CO., Inc.
40 Worth Street, New York City

Licensed Finishers

THE BRUNSENE COMPANY
20 Thorndike Street
East Cambridge, Mass.

COOLEY, INC.
Pawtucket, R. I.

PERMATEX FABRICS CORP.
Jewett City, Conn.

VELVERAY CORPORATION
45 White Street, New York, N. Y.

CONGOLEUM-NAIRN, INC.
Kearny, N. J.

SLOANE-BLABON CORPORATION
Trenton, N. J.

MASLAND DURALEATHER CO.
Amber & Willard Streets
Philadelphia, Pa.

C. H. MASLAND & SONS
Carlisle, Pa.

TEXTILEATHER CORP.
Toledo, Ohio

WATER . . . ducks may take to water . . . but repeated wettings are not good for canvas . . . shrinkage produces rips, etc.

FLAME . . . ordinary duck and canvas tents, awnings, tarpaulins, and what have you, are an ever present Fire Hazard.

ROT . . . the fungi of mildew-mold shortens the vital life of canvas.

but now Chemistry has developed . . . and made available . . . "Phil-Pro-Tex" . . . a special finishing process . . . that makes duck and canvas not only water-repellent, but flame-resistant as well . . . and rot is retarded, too.

This new Super Protection for textiles has been scientifically created by experienced specialists . . . thoroughly field-tested through extensive use.

For further details write or wire Philadelphia Textile Finishers, Inc., 3701 N. Broad Street, Philadelphia, Pa.

PHIL-PRO-TEX
REPELS
WATER · FLAME · ROT

shortcomings, it's too late to do anything about it—two stopgap methods of getting rubber ahead of the scheduled program were publicized this week by the Petroleum Industry War Council and Standard Oil (N. J.).

W. S. Farish of Standard disclosed discovery of a short-cut method of making "bathtub rubber," a butyl type called flexon. The Petroleum Council revealed that the industry is undertaking a "quick butadiene" program utilizing existing refinery facilities.

It is claimed that these two admittedly make-shift methods may add 200,000 tons of synthetic to the 370,300 tons which, Nelson figures, will be produced by the regular program by the end of next year.

Draft Deferments

If you read the July 11 Washington Bulletin there were no surprises for you in this week's announcement on the draft status of married men. Note that nothing in the new regulations alters present procedure on occupational deferment. Regardless of marital status, such deferment is available to men holding down critical jobs (skilled and scarce) in essential industries.

It is up to local draft boards to decide what industries are essential, what occupations critical. For their guidance, Selective Service has previously prepared analyses of certain key industries, this week released a list of 38 industries considered essential.

If your industry is on the list it does not mean that all your employees are draft-exempt. It does mean two things: (1) Your employees in critical occupations can probably get occupational deferments from the draft. (2) Your employees in non-critical occupations can't get occupational deferments, but they will not be called until after men with the same marital status who work in nonessential industries.

Manpower

Chairman McNutt of the War Manpower Commission was tossing figures out of the windows of the Social Security Building by the hatful this week. He announced that the nation's total employment had passed the 50,000,000 mark to hit the highest of all highs. He warned that the current employment estimate of 12,500,000 in war industries (as against 6,900,000 on Jan. 1 and 9,000,000 on Apr. 1) meant that most of the immediately available war workers had been absorbed.

Hence, the urgency of the war manpower program (BW—Jul. 4'42, p15).

Hence, too, the urgency of a new plan

announced this week for industrial cooperation on employment problems through area and regional committees.

Control of Labor Turnover

To prevent labor "piracy," to stop needless turnover, the war manpower chairman mapped these steps:

(1) War Manpower Commission representatives will meet with representatives of industry, labor, and affected government agencies in areas where the employment problem appears critical.

(2) As the WMC representatives report that cooperative plans have been set up, the commission's chairman will officially designate certain areas as "critical," and will list critical occupations within them.

(3) After a cooperative plan is announced, no employer of critical labor may hire across area lines except through the United States Employment Service, or under conditions approved by WMC.

Area committees will normally consist of two to four labor leaders, the same number of management men, and representatives of such governmental

arms as WMC, USES, WPB, the Army, the Navy, and Civil Service. Each area setup will be a part of one of twelve regional setups, each headed by a cooperative committee.

• **Appeal Machinery**—Either an employer or a worker who feels aggrieved by the workings of the plan may appeal first to the area committee, then to the WMC area representative, and on—through the regional committees—up to WMC's National Labor-Management Policy Committee (BW—Jun. 13'42, p5).

Patriotism vs. Production

If you don't believe that patriotism can interfere with production, consider the case of Metal Products Corp., a small war plant in Miami. Assembly-line workers walked out and stayed out for a day because two well-paid employees in semiofficial jobs refused to participate in the war savings payroll plan.

The strikers just wanted the non-participants to get out. One employee "not interested in bonds," was dismissed; the other, who "couldn't afford it," signed up for the bonds. And all the workers got paid for the war work they didn't do during their one-day absence from their benches.

NWLB's Auto Docket

When other labor crises fail to provide their quota of midsummer nightmares, the National War Labor Board can always fall back upon the three big automobile cases. The second and third of these cases were dumped in the lap of NWLB this week (Ford on Monday, Chrysler on Wednesday), while the General Motors case, contrary to earlier expectations, still was awaiting decision.

Significant because of the auto industry's role in war production and because they involve pay issues bearing on the inflation problem, these cases have been hitched—like many others—to the lode-star of Little Steel. By midweek, nobody expected a G.M. decision before next month. Meanwhile, rank-and-file union membership was reported chafing at the delay.

The Ford case is complicated by the company's counterdemand for an end to the checkoff (BW—Jun. 20'42, p50).

Crackdown on War Frauds

The Department of Justice is springing a nation-wide attack against war frauds, under study for weeks. Thurman Arnold, whose trustbusting activities have been curbed for the duration, is in on the campaign. So is J. Edgar Hoover.

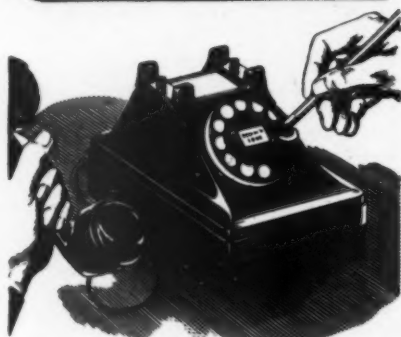
Frauds on which the D. of J. is



LITTLE FELLOWS' MAN

Boss of the Smaller War Plants Corp. (page 80), Lou E. Holland stands to be one of the busiest men in Washington as little business comes in for loans. And he knows the problems of his clients—organized Kansas City's 32-company pool, the Mid-Central Associated Defense Industries, Inc., landed a Navy contract for this combine.

*"Can we get
enough labor
supply in
that upstate
New York
Community?"*



**"Let's check it
with our bank—the
Marine Midland"**



**MARINE MIDLAND
TRUST COMPANY**

of New York

120 BROADWAY

*At the Gateway to New York State the
World's Richest Market*

Member Federal Deposit Insurance Corporation

WASHINGTON BULLETIN (Continued)

bringing offenders to book are sale of influence by so-called defense brokers and various misdeeds by war contractors such as padding accounts in cost-plus contracts, chiseling on specifications, hoarding critical materials in violation of WPB orders, etc. Grand juries are at work in Washington, Newark, N. J., Springfield, Ill., and Los Angeles.

The Department of Justice's activity isn't just a flash in the pan. Under legislation now nearing enactment, the three-year statute of limitations on frauds against the government won't begin to run till after the war. This will give government prosecutors and postwar congressional investigating committees a long rope.

Parity and the Consumer

The long wrangle over the farm parity price issue (BW-Jul.11'42,p84) is ending, as expected, in a compromise. The Administration will have to accept 100% parity loans on basic farm crops in return for the right to sell 125,000,000 bu. of government-held wheat for stock feeding at 85% of corn parity.

Leon Henderson and consumers are holding the bag. The impact of parity-plus returns guaranteed to growers by loans at 100% of parity will be felt increasingly. Henderson thought he saw a way out by injecting subsidies at the grower, processor or distributor level. Subsidies were coming to a showdown this week in the Senate, where the Administration is trying to beat down a proposal by the Appropriations Committee forcing OPA to drop subsidy plans, let prices go where guaranteed returns to farmers will take them.

If the Senate kills subsidies, look for a string of punctured price ceilings.

Petrillo vs. Radio and Records

The broadcasting industry, well accustomed to fighting its battles unaided, received moral support from an unexpected quarter this week when Chairman James L. Fly of the Federal Communications Commission blasted the American Federation of Musicians.

James C. Petrillo, A.F.M.'s fiery little president, has set August 1 for the funeral of all forms of what he contemptuously terms "canned music" (BW-Jun.20'42,p8).

This means all transcriptions for radio broadcasts and the disks which are played on the nation's thousands of jukeboxes; Petrillo has indicated that he may make an exception of recordings for home use—if record companies will assure him that their disks will stay in the home.

Such a guarantee, the companies con-

tend, couldn't be made without violating the antitrust laws.

Manufacturers are hoping that Petrillo and his boys will get caught in just that net, but so far the Antitrust Division hasn't made a move. Assistant Attorney General Thurman Arnold's growls about "make work" programs have held Petrillo in check in the past, might do so again.

Before taking concerted action to help themselves, broadcasters are awaiting the outcome of final discussions stemming from this week's meeting in Chicago of the board of directors of the National Assn. of Broadcasters.

Stokers Get a Reprieve

Residential conversion of oil to coal heating has been expedited considerably in recent weeks by WPB. The board's original order shutting down production of residential stokers May 31 later was amended to permit assembly of stokers until Sept. 30 from wholly fabricated parts in manufacturers' possession on May 31.

Capital Gains (and Losses)

The Bible Institute, Inc., American Plate Glass Co., and H. W. Lederer, individually and as president of the corporations, all with principal offices in New York, have been ordered by the Federal Trade Commission to cease and desist from deceptive acts and practices in promoting sale of Bibles and other religious publications.

Due to critical railroad labor shortage caused by the draft and war industry inroads, the Railroad Retirement Board plans to ask the 40,000 retired railroad employees now receiving pensions if they would like to return to their old jobs for the duration.

OPA's statement on wage policy at the airframe stabilization conference in Los Angeles (page 78) precipitated the expected fight. Philip Murray of C.I.O. immediately charged OPA with attempting to fix wages which, says he, is an invasion of NWLB's province.

Jesse Jones and Leon Henderson took positive action while Congress wrangled over funds for subsidies to protect price lids. Defense Supplies Corp. proposes to absorb increased transportation cost on gasoline for the East Coast.

Lack of representation for the advertising industry in the new Office of War Information headed by Elmer Davis has caused some hard feelings. These will probably be salved by formation of an advertising unit of OWI's domestic branch.

—Business Week's
Washington Bureau

FIGURES OF THE WEEK

THE INDEX (see chart below)

PRODUCTION

	\$ Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
Steel Ingot Operations (% of capacity).....	99.1	97.7	98.3	95.1	95.2
Production of Automobiles and Trucks.....	22,980	22,680	22,300	60,190	114,318
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$39,683	\$38,914	\$42,319	\$14,983	\$31,444
Electric Power Output (million kilowatt-hours).....	3,429	3,424	3,464	3,473	3,178
Crude Oil (daily average, 1,000 bbls.).....	3,657	3,297	3,700	4,229	3,871
Bituminous Coal (daily average, 1,000 tons).....	2,034	11,904	1,863	1,960	1,706

TRADE

Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars).....	80	80	80	84	89
All Other Carloadings (daily average, 1,000 cars).....	63	63	62	46	61
Money in Circulation (Wednesday series, millions).....	\$12,489	\$12,416	\$12,176	\$11,109	\$9,695
Department Store Sales (change from same week of preceding year).....	-1%	-8%	+7%	+27%	+28%
Business Failures (Dun & Bradstreet, number).....	159	186	173	203	184

PRICES (Average for the week)

Spot Commodity Index (Moody's, Dec. 31, 1931 = 100).....	233.0	231.8	228.4	222.3	206.8
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	155.3	155.0	153.0	150.1	142.2
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	183.4	181.1	181.0	173.9	148.4
†Finished Steel Composite (Steel, ton).....	\$56.73	\$56.73	\$56.73	\$56.73	\$56.73
†Scrap Steel Composite (Iron Age, ton).....	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17
†Copper (electrolytic, Connecticut Valley, lb.).....	12.000¢	12.000¢	12.000¢	12.000¢	12.013¢
Wheat (No. 2, hard winter, Kansas City, bu.).....	\$1.08	\$1.09	\$1.12	\$1.24	\$0.99
†Sugar (raw, delivered New York, lb.).....	3.74¢	3.74¢	3.74¢	3.74¢	3.47¢
Cotton (middling, ten designated markets, lb.).....	19.87¢	19.83¢	18.71¢	18.59¢	15.26¢
†Wool Tops (New York, lb.).....	\$1.244	\$1.222	\$1.187	\$1.275	\$1.263
†Rubber (ribbed smoked sheets, New York, lb.).....	22.50¢	22.50¢	22.50¢	22.50¢	21.99¢

FINANCE

90 Stocks, Price Index (Standard & Poor's Corp.).....	69.8	67.6	66.6	70.7	81.8
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's).....	4.30%	4.32%	4.33%	4.28%	4.28%
High Grade Corporate Bond Yield (30 Aaa issues, Moody's).....	2.83%	2.83%	2.85%	2.83%	2.74%
U. S. Bond Yield (average of all taxable issues due or callable after twelve years)	2.34%	2.34%	2.32%	2.38%	2.15%
U. S. Treasury 3-to-5-year Note Yield (taxable).....	1.19%	1.17%	1.17%	0.99%	0.68%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average).....	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6 months, N. Y. City (prevailing rate).....	1-1/4%	1-1/4%	1-1/4%	1-1/4%	1%

BANKING (Millions of dollars)

Demand Deposits Adjusted, reporting member banks.....	25,654	25,502	26,022	23,884	23,920
Total Loans and Investments, reporting member banks.....	32,366	32,382	31,736	30,132	28,481
Commercial and Agricultural Loans, reporting member banks.....	6,456	6,469	6,552	6,722	5,933
Securities Loans, reporting member banks.....	867	912	879	933	951
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks..	18,313	18,232	17,346	15,145	14,471
Other Securities Held, reporting member banks.....	3,392	3,410	3,546	3,665	3,557
Excess Reserves, all member banks (Wednesday series).....	2,320	2,260	2,782	3,385	5,124
Total Federal Reserve Credit Outstanding (Wednesday series).....	3,069	2,873	2,708	2,386	2,249

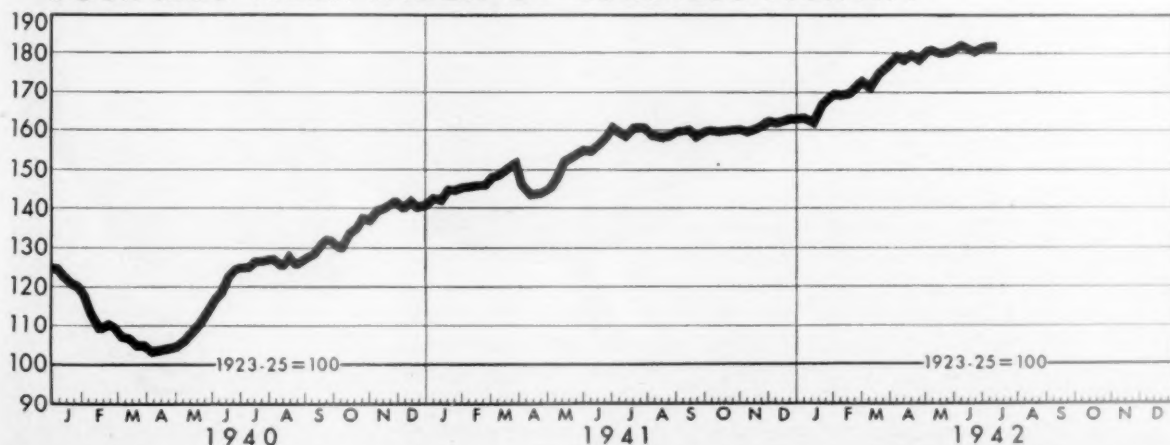
* Preliminary, week ended July 11th.

† Revised.

‡ Ceiling fixed by government.

§ Date for "Latest Week" on each series on request.

BUSINESS WEEK INDEX OF BUSINESS ACTIVITY



Be Calm Courteous Effective

Right now, when times are tense and everybody is under strain, "The Voice with a Smile" is more important than ever.

We've all got a big job to do and the friendly, effective use of the telephone helps every one do it faster and better.

The calm way is usually the competent way. Being courteous usually means saving time and tempers all along the line.

BELL TELEPHONE SYSTEM



"THE TELEPHONE HOUR"—presenting great artists every Monday evening — N. B. C. Red Network.



THE OUTLOOK

Wanted—67% More Output

Specification for increased arms production must be met by expansion of metals plant, a better use of scrap, faster flow of materials—and tighter squeeze on civilian goods.

What with the final House Ways and Means version of the tax bill, continuing Congressional squabbles over Office of Price Administration funds, and the National War Labor Board's showdown in the Little Steel case, business had a plentiful budget of domestic news to digest this week.

But most far-reaching for the outlook are Hitler's spectacular successes in the Russian campaign (page 54). That puts the emphasis right back on American production—production now, of weapons to help halt current Axis drives. The threat is that Germany will add Russian industry, Caucasian oil, and Japanese raw materials to its existing mighty war potential (BW—May 9'42, p88).

Finding the Limit

Great as those gains would be, our own production could yet more than match them. But—and this is what we must recognize—they cannot be discounted by comparison with some fantastic flood of American arms envisioned for some far distant date. There is a limit even to what we can do.

Donald Nelson predicts that our factory war output will rise from 45 billion dollars this year—the rate we are running at right now—to 75 billion dollars in 1943. Conceivably, dollar value might soar above that, if costs were inflated by higher prices or by inefficient waste of man-hours. But in physical terms, "I think that is just about the limit that our economy can stand. The materials needed to get production substantially higher simply are not available."

Materials the Hitch

On the fabricating end, industry's achievements have exceeded expectations. That's not only because of rapid conversion of automobile and appliance factories. Aircraft producers have speeded operations enormously with powered conveyor lines, and our merchant shipbuilding capacity has soared as a result of prefabrication and assembly methods. Indeed, Admiral Vickery said last week that ships totaling 30,000,000 deadweight tons carrying capacity could be turned off the existing ways in 1943 (BW—May 30'42, p13). The hitch is the supply of materials. That many ships would require almost half of the nation's steel plate capacity.

Indeed, with our production of metals, lumber, textile fibers and other materials running close to capacity for some time past, the real question is, How can we boost arms output 67%?

Expansion Sources

Only part can come from further civilian curtailment. Already in June, the Federal Reserve Board reports, half our industrial production and 70% of our durable manufacturers were going into war. Part of the arms increase will come from expansion of aluminum, magnesium, electric steel, and other capacity already under way. An additional lift will be derived from increased utilization of scrap materials,

for which collection drives will have to be intensified.

And, supplies now going into inventories will have to move into finished products. This stockpiling of materials has been taking two forms. The wasteful process, by which companies with high priority ratings ordered more than necessary for immediate needs, is already being controlled and eliminated under the PURP allocations system.

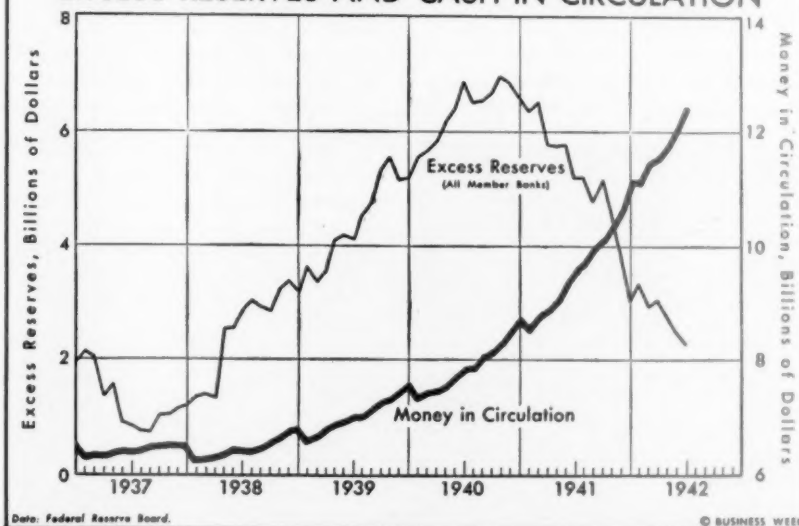
Faster Flow

Last week the War Production Board freed for war industries inventories of critical materials totaling several hundred thousand tons which had previously been frozen to prevent their use by civilian manufacturers.

But we have also had to fill up the pipelines supplying the manufacturing system. Arms production requires that a considerably larger quantity of goods be "in process" than would a comparable level of peacetime output. Soon this stocking-up will be completed, and current output of steel and other com-

IN THE OUTLOOK:

EXCESS RESERVES AND CASH IN CIRCULATION



The accelerating rise in the amount of money in circulation poses a double-edged problem for fiscal controllers. Banks are buying more and more government bonds, thus creating deposits against which required reserves must be posted at the expense of excess reserves. Withdrawal of funds from banks into circulation also cut down those reserves. They've declined to \$2,260,000,000 in June, and the Federal Reserve may soon have to reduce

reserve requirements (BW—Jun. 13'42, p91). Partly, money in circulation has expanded in line with the \$18,000,000,000-a-year advance in national income rates during each of the past two years. But money outstanding has jumped \$2,800,000,000 since June, 1941, as against only \$1,800,000,000 in the preceding year. That reflects fear hoarding—which could turn into fear spending and wreck plans for control of inflation.

modities will flow directly into final fabrication.

On our total industrial activity, the net effect will be a rise. The Business Week Index, now slightly above the 180 mark, will surely advance to the 200 level over the next year. But, though we are not quite yet at our ceiling, additional increments will come harder.

In wartime, of course, this increased industrial volume does not hold the same implications for business as in peacetime, even aside from the impact of taxes. Small civilian firms particularly will need help, and most of it will come from the public purse. For all the plans to concentrate civilian production in the plants of the 25,000 small manufacturers unable to convert to war (page 80), Congress nevertheless is figuring on subsidies to alleviate their distress. And when Price Administrator Henderson again appealed to Congress this week for funds to reinforce price control, for the first time he suggested that subsidies be used to compensate retailers for reduced volume, as well as wholesalers and manufacturers.

Cutting Red Tape

OPA facilitates relief for what it calls anomaly cases of hardship under its price ceiling. Fair trade dodge hit.

Having granted processors and farmers relief from squeezes growing out of



OPA VOLUNTEER

One of the 1,000 volunteers, Miss Clare Killeavy, who started out last week to explain OPA regulations on prices to storekeepers in New York City, talks over the problem with a delicatessen shop owner.

the General Maximum Price Regulation (BW-Jul.11'42,p15), the Office of Price Administration is now focusing more attention on "anomaly cases."

In these instances of hardship, special circumstances account for the pinch. Generally speaking, "anomalies" fall into two main classes: An abnormally low ceiling because the seller was cut-rating during the March base period, and a legal squeeze due to nonobservance of fair trade contracts between manufacturers and retailers under which prices of many nationally-advertised brands are fixed.

• **The Fair Trade Dodge**—On the fair trade score, OPA all along has been at cross purposes with the laws of the majority of the states. While GMPR may sometimes theoretically enjoy a higher status than state legislation, awkward situations began to crop up. For instance, whenever a manufacturer wanted to obtain an injunction against a dealer for nonobservance of his fair trade contract, the dealer promptly pleaded that the GMPR was preventing him from boosting his cut-rate prices back to where they should be.

Consequently OPA's general counsel, David Ginsburg, last week amended OPA's initial stand on fair trade contracts (BW-May23'42,p66) and ruled:

Where the price established by fair trade contract has been generally observed [by the trade] during March and the [individual] violations represent the abnormal situation, enforcement of the fair trade contract would not be regarded by this office as substantially interfering with the purpose of GMPR or Emergency Price Control Act.

In such cases, if a retailer is enjoined by a state court from selling at the maximum price authorized by GMPR, he may apply to OPA for an adjustment of that maximum price in accordance with Section 18.

• **Victory for Fair Trade**—What this amounts to is that manufacturers and distributors can enforce their March fair trade contracts and haul violators into court without fear that OPA will intervene on behalf of the violator. For the fair trade interests, this represents a distinct victory.

Meantime, the most dramatic instance of granting relief from abnormally low March ceilings was staged in Chicago in the record-breaking time of a single day. There the Jewel Food Stores (a chain of 150 outlets) on June 5 petitioned the OPA regional office for higher meat prices and was given permission to boost prices on 15 items on June 6.

• **Nips Red Tape Idea**—Chirped Leon Henderson: "I call this case to the attention of retailers to correct the widespread impression that red tape and expensive time-consuming trips to Wash-



WHAT—NO "X"?

Don't look for an "X"—the new gas program has no unlimited classification. Windshield stickers attached to the cars will show whether the driver receives a basic "A" ration or gets supplemental rations of "B" and "C" cards. "S" cards are commercial.

ington are the lot of the storekeeper if he wishes to present an adjustment case and obtain relief."

As notable as the speed with which the Jewel case was handled is the fact that a regional office, and not Washington, authorized relief. This is in line with OPA's new philosophy of decentralizing its activities.

• **Relief All Along the Line**—Under a brand new amendment to GMPR—No. 10—these decisions will apply not only to retailers, but also to manufacturers and wholesalers. Heretofore a manufacturer or wholesaler had to petition for a special amendment to GMPR if he was caught with low prices. Under Amendment No. 10, all petitions will be handled as follows:

(1) A retailer may petition any duly authorized OPA officer (meaning not only Washington, but all regional offices) for relief in accordance with Temporary Procedural Regulation No. 2.

(2) Manufacturers and wholesalers may similarly petition in accordance with Procedural Regulation No. 1.

(3) Any seller (retailer, wholesaler, manufacturer) may petition regional offices for any cause (other than abnormally low prices) in accordance with Procedural Regulation No. 1.

• **Surprisingly Few Cases**—Petitions for retail relief, incidentally, have been comparatively few and far between so far. Best estimate is that there have been fewer than a thousand.

In speeding up relief, OPA doesn't think prices will rise to any extent. The idea is to get at the abnormal cases.

Coming, Forced Savings

Officially, there's just no such thing under consideration, but several government agencies are working on plans to damp down inflation, help pay for war, and provide postwar cushion.

Britain has had forced savings for over a year. Canada just broke down and put it in the new budget. We are going to have it soon. It's a question of when and what sort. Several agencies are already working quietly on blueprints.

This despite the fact that, officially, the idea is "not under consideration." A number of well engineered plans will be discovered by happy coincidence the first time the Administration shows signs of changing its stand.

• **Some Exemptions**—On their face, the various plans differ widely. Underneath all have the same idea—to tie up part of consumer income so that it cannot be used until after the war. To accomplish this, planners want to make everyone put a specified percentage of his income into nonnegotiable government securities. To avoid unreasonable hardships and encourage private savings, they would allow fairly liberal exemptions for income spent in non-inflationary ways, such as debt repayments and life insurance premiums.

Purpose of compulsory savings proposals is to help head off whirlwind inflation. With at least \$67,000,000,000 going into war production this fiscal year, there won't be enough civilian goods to match the increase in money incomes. One way or another the public must be persuaded to save a large part of its income instead of using it to bid up prices.

• **Voluntary Plans Inadequate**—Heavy taxes and voluntary war bond sales will do a lot to mop up the inflationary excess income, but economists are convinced that they won't do enough. There's a limit on how much taxes the public will accept—or at least, there's a limit on how much a politically minded Congress will impose on its electorate. There is also a fairly rigid maximum on the amount of war bonds the public will buy on a voluntary basis.

Economists estimate that by the beginning of next year the "inflation gap" will be around \$20,000,000,000. That is, the amount the public wants to spend will exceed the value of available goods by some such amount.

• **Fairer Than Taxes**—Tax experts don't count on compulsory saving to close the inflation gap by itself, but they think it would be a big help. They also think it would be fairer to the public than trying to do the job with taxes and voluntary bond sales alone.

So far the Treasury has set its face like flint against any idea that involved com-

pulsion. From the beginning Secretary Morgenthau has championed voluntary sale of bonds. For the time being, his opposition keeps forced savings plans under cover.

• **Mixed Signals**—Even in the Treasury there are hints of a plan to put teeth in the war bond sales campaign, however. Assistant Secretary John L. Sullivan said last week that if the voluntary plan did not raise enough we would have to resort to compulsion. Undersecretary Daniel W. Bell was quick to deny that this meant a change in Treasury policy. Forced savings advocates grinned.

Elsewhere in the government, officials predict that forced savings will be one of the first things considered after the November elections. There's even a chance it will come up before elections. Chairman Walter F. George of the Senate Finance Committee has offered a plan of his own involving tax deductions for purchases of government bonds—a variation of the forced savings idea.

• **Higher Taxes and Refunds**—As a starter, forced savings will probably take the form of an increase in taxes and a promise of postwar refunds. That's the way England worked into it.

When the 1941 budget lowered exemptions and stiffened tax rates, the British government sweetened the dose by promising to return the extra taxes

after the war. Today an Englishman simply pays his tax bill and gets a postwar credit for part of it with the government controlled Post Office Savings Bank (BW—Apr. 25 '42, p34).

• **Canada's Plan Similar**—The system proposed in the new Canadian budget will work about the same way (BW—Jul. 4 '42, p39).

The United States will probably follow this pattern also. The Administration is bearing down hard on Congress trying to get heavier taxes. So far, the legislative branch has been stubborn. The rebate plan offers a logical compromise.

• **Possibility of Broadening**—Once compulsory savings gets in the revenue system, it will probably expand steadily. Economists want to make it an effective anti-inflation weapon in its own right, not just a sweetener for new taxes.

Two approaches are possible in setting up a comprehensive system. In the end they work out to practically the same thing. The United States may move along either or both lines.

• **Two Possible Methods**—One way is to require everyone to put a certain percentage of his income—say 10%—into a kind of government bond which is nontransferable and bears no interest. Then allow fairly generous deductions (but not as much as 100%) for private savings. This would make life insurance premiums, payments on mortgages, possibly even deposits in savings banks, eligible for deduction.

The other method is to require a certain amount of private saving from each individual—say 25% of his income. If he can't show this minimum at the end of the year, make him put the difference in government bonds. With comparable rates and the same definition of private



Last week, five months after the formation of the Automotive Council for War Production (BW—Jan. 31 '42, p15) top men in the War Production Board, including Lt. Gen. William S. Knudsen and Donald Nelson, chairman of WPB, got first-hand informa-

tion on the status of the converted automotive industry at a meeting of the council and later in discussion with heads of two of the nation's largest war production firms—C. E. Wilson (left) of General Motors and K. T. Keller (right) of Chrysler.

savings, this method would be equivalent to the first.

• **Averting Hardship**—Either way, the important thing is to allow liberal deductions for private savings. This will automatically induce consumers to utilize more of their incomes in noninflationary ways. It will also get around the problem of fixed obligations which set a limit to the amount an individual can pay in taxes or bond purchases.

The big argument advanced for com-

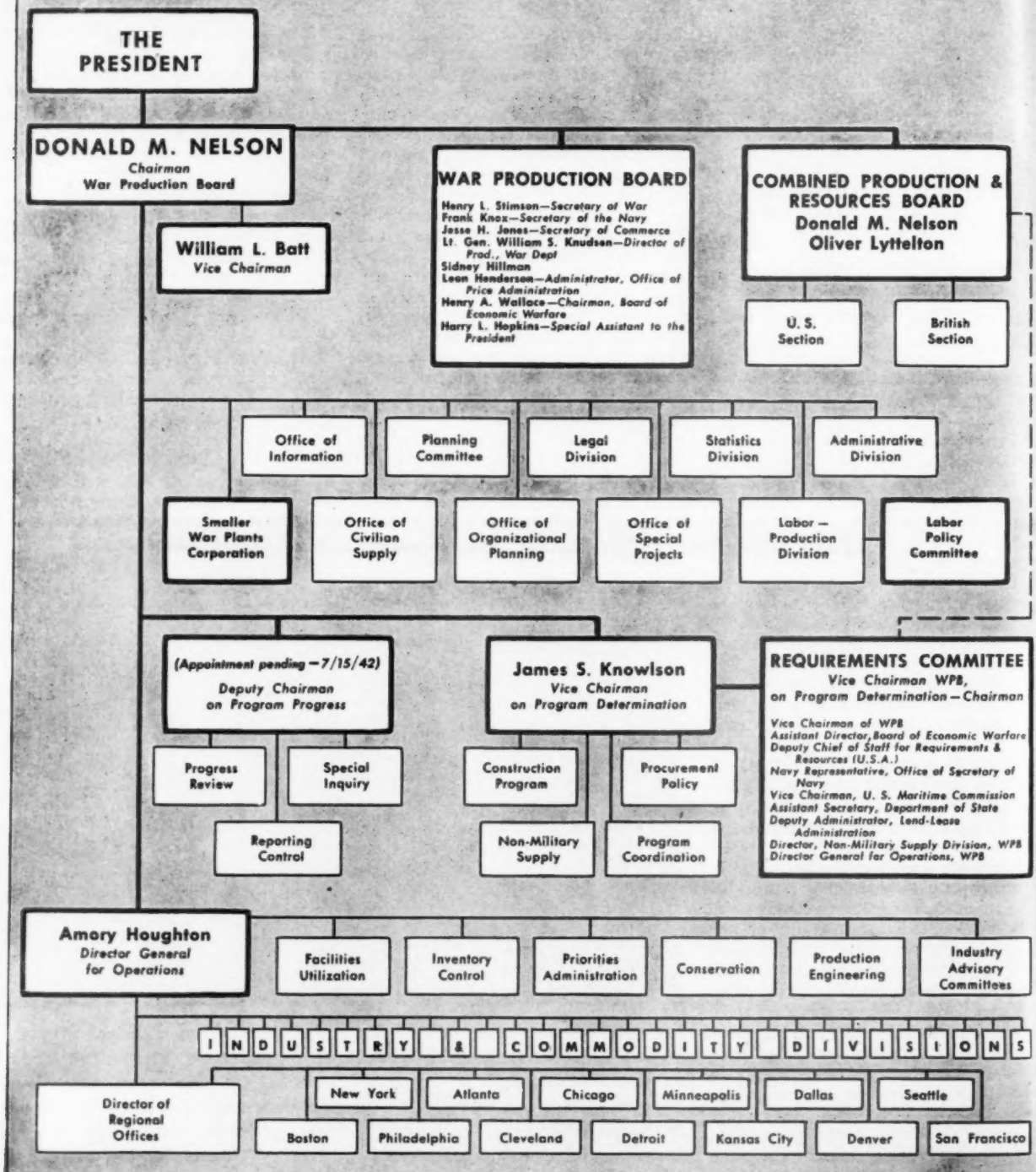
pulsory savings is that it can soak up excess income more fairly and efficiently than any other method. By promising eventual refunds the government can bear down on the lower incomes which now carry comparatively light taxes. Economists are convinced that to check inflation those incomes must be reduced.

• **Postwar Cushion**—Another big selling point is the way forced savings would store up purchasing power to tide con-

sumers over the postwar adjustment period. In this sense, the credits act as a kind of automatic unemployment insurance. Paying off credits during the slack period when industry is shifting back to civilian production would also do a lot to cushion deflationary effects of unemployment and suspended production.

Since forced savings is intended primarily to tap the low incomes, rates will naturally be stiffer in low brackets

THE HIGH COMMAND — REORGANIZED





THE ARMY TAKES OVER

Known to the traveling public, especially the convention-goers, as the largest structures of their kind, two famed buildings—the 3,000 room Stevens Hotel in Chicago, and Atlantic City's Municipal Auditorium—are about to

be taken over on a rental basis by the Army Air Corps for training and housing centers. The Stevens together with the 1,000-room Congress Hotel nearby should comfortably accommodate 15,000 trainees for eating, sleeping, and schooling in what is to be the world's largest radio training school.

At Atlantic City, three of the largest and most luxurious resort hotels—the Traymore, Claridge and Ritz-Carlton are also being taken over on the general plan adopted at Miami (BW—Mar. 7 '42, p. 26) in which rentals are to be determined through court adjudication.

than high. As one official explained, "It looks like a regressive levy, but it really isn't. What we'll actually do is take money from the low incomes and promise it back. In the high incomes, we'll just plain take it."

Actually, a progressive set of rates for forced savings would be impractical. In the highest bracket, the effective tax rate proposed for next year is about 88%. Add to that a 10% forced savings and a 2% state income tax, and the question would come up: How are the Rockefellers going to eat?

The answer is, of course, that the Rockefellers would eat by liquidating other assets. That would mean no net reduction in consumption.

The amount that forced savings would bring the government is a wide open question. Opponents, such as Secretary Morgenthau, insist that voluntary bond purchases would dry up as soon as compulsion appeared. With war bond sales scheduled to reach \$1,000,000,000 a month, this is a powerful argument.

Advocates contend that most bond buying now comes from the middle and upper income brackets, which would not be affected greatly by forced savings. They think most of the voluntary buying would continue, while forced savings would tap low incomes.

Moreover, they argue, the important thing is the total volume of savings—including private noninflationary spending—that the program induces. A properly drawn system would encourage heavy private savings as well as large bond sales.

A Tax Bill at Last

House committee finally gives way to pressure for more revenue, but nobody likes rates. Big changes likely in Senate.

In its last agonized effort to write a tax bill that would please somebody, the House Ways and Means Committee snatched up a new set of compromises. Yet the result pleases practically nobody, least of all the committee. Odds are that the Senate will rewrite the whole thing.

• **The Tug of War**—The Treasury asked for a tax bill that would produce a minimum of \$8,700,000,000 additional revenues. Through four months of debate, Ways and Means members stood on their congressional prerogatives and refused to adopt rates as stiff as Secretary Morgenthau recommended (BW—Jun. 20 '42, p. 20).

Until last week, the committee insisted that its object was to draw up a sound, workmanlike piece of legislation, that it was not trying to reach any particular dollar goal. Moving painfully but steadily, it had put together a set of tentative proposals that would have yielded about \$5,900,000,000 in additional revenues (perhaps only \$5,000,000,000 if postwar refunds to corporations were allowed). Then the committee broke.

• **Income Tax Rates Jump**—In the final two days, Ways and Means scrambled

to add measures that would boost the dollar yield. Individual surtaxes went up another 1% in each bracket. This makes the range from 13% on the first \$2,000 of surtax net income to 82% on anything over \$200,000. (Under present law they go from 6% to 77%).

Corporation surtaxes on firms with incomes over \$25,000 jumped to 21% instead of the 16% tentatively approved. This gives a combined normal and surtax load of 45%. (At present the surtax is 6% on the first \$25,000, and 7% on the rest; combined normal and surtax is about 30%).

• **Refund Dropped Again**—Reversing itself again, the committee threw out the proposal for refunding part of the excess profits tax after the war. Previously it had suggested a refund equal to 14% of excess profits. With the tax set at 94% this would have made the effective rate 80%. Instead, Ways and Means now plans a rate of 87.5% with no refunds.

As a result of these changes, the committee bill will produce at least \$6,144,000,000 in additional revenue and a bumper crop of criticism. Chairman Robert L. Doughton thinks it will bring in \$7,000,000,000.

• **Total Load 24 Billion**—Income taxes are the program's mainstay. New levies on corporation income will produce up to \$3,200,000,000. Individual income taxes will dredge up another \$3,000,000,000. Excises and miscellaneous will bring in something like \$800,000,000.

Added to the present structure this gives a total federal tax load of about \$24,000,000,000. Corporation incomes

House Committee Personal Income Tax Plans

Net annual income before personal exemptions	Single, no dependents		Married, two dependents	
	Present law	Proposed new law	Present law	Proposed new law
\$500
600
700
800
900
1,000
1,200
1,500
2,000
2,100
2,200
2,300
2,400
2,500
3,000
4,000
5,000
6,000
8,000
10,000
15,000
20,000
25,000
50,000
100,000
500,000
1,000,000
5,000,000

will carry about \$10,200,000,000; individual incomes \$8,000,000,000 (see table).

• **Not Enough, Says Treasury**—Stiff as the last minute increases are, they failed to buy off the Treasury. To Secretary Morgenthau and his staff, \$8,700,000,000 is the minimum amount of new income that a tax program should raise. From their viewpoint a bill which produces \$1,700,000,000 to \$2,500,000,000 less than that is pitifully inadequate. Pressure for even higher rates will continue.

The Treasury's own program called for individual surtaxes ranging from 12% to 86%, and for corporation normal and surtaxes totaling 55%. It also wanted higher estate and gift taxes which the committee refused. Its schedule of excises would have brought in \$1,340,000,000 instead of the committee's \$800,000,000 (see table).

• **Two Controversial Points**—Other sore spots were mandatory joint returns for married couples and elimination of tax exemption for state and local bonds. The Treasury pushed both proposals hard, but Ways and Means wouldn't buy.

Even though the Ways and Means plan is easier than the Treasury's, taxpayers are not going to glow with gratitude when they look it over. It imposes the heaviest tax load in history. Moreover, there will be lots of hardship cases to furnish ammunition for critics.

• **Clear Road in House**—Revenue bills are usually reported under a rule in the House, and so the Ways and Means program will probably go to the Senate about as it stands now. Once it reaches the Senate Finance Committee the re-writing will begin.

The question of postwar refunds is almost sure to come up again in the Senate. Odds are that it will be adopted. Even the Treasury suggested that in

cases where the excess profits tax exceeded 80% corporations should get a rebate later. Donald Nelson, for WPB objects strenuously to rates so high that they would sap incentive.

• **Opposing Philosophies**—In connection with the rebate problem, the Senate will also review the excess profits tax rate. Ways and Means now suggests a flat 87.5%. The Treasury wants a graduated scale, ranging from 50% to 75% but it also wants to apply normal and surtaxes to any excess profits that the excess profits tax doesn't take. Calculated this way the Treasury's program would really impose an effective rate of 88.75% in the top bracket.

The committee, on the other hand, would exempt excess profits from normal and surtaxes, so that the 87.5% excess profits tax it asks would represent the maximum effective rate.

• **Prospects in the Senate**—Experts like the principle of separating excess profits from "normal" income. Most of them expect the Senate to keep it. If they do,

Senators will probably shove the rate back to 94% and restore the 14% postwar refund which the Ways and Means committee knocked out at the last minute.

• **OPA Has a Protest**—The Office of Price Administration will make a bitter fight to strike out the 5% tax on freight transportation, adopted by Ways and Means over Leon Henderson's protest. Henderson contends that the tax menaces his price stabilization program by raising costs.

Sales tax advocates are also planning a campaign in the Senate. Treasury opposition battered down the sales tax in the Ways and Means Committee, but the idea may get stronger support on the other side of the Capitol.

If the Senators finally write their own version of the revenue act, the Ways and Means Committee will probably be relieved.

FIBER-CAN PROCESS

Round cans for scouring powder, oblong cans for spices, flat pocket cans for tobacco, cans square or round for baby powder—all have been made from time to time with fiber bodies and metal ends on special machinery. All of them can now be made on standard can-making machinery by new methods recently developed by American Can Co., and to be made available to the entire can industry.

Fiber sheets trimmed to the size of tin plate are lithographed on the same presses used for decorating and labeling tin. Standard machines shear the sheets, form the bodies. Ends are seamed on with regular seaming machines. The new methods come to the rescue of manufacturers of "dry" drugs, cosmetics, spices, powders, etc., and of some liquid products other than foods like tomatoes and peas which are cooked in the container. They will not now have to run the marketing risk of changing the shelf appearance of their products.

Excise Tax Changes in the House Bill

Increases in Rates

Distilled spirits—From \$4 a gallon to \$6.
Beer—From \$6 a barrel to \$7.
Still wines—From 8¢, 30¢, and 65¢ a gallon, depending on alcoholic content, to 10¢, 40¢, and \$1.00; comparable increases on sparkling wines and liqueurs.
Cigarettes—From \$3.25 a thousand to \$3.50 for small sizes; comparable increases for large sizes. Committee rejected Treasury suggestion to impose \$4 tax on 15¢ brands, and only \$3.50 on 10¢ brands.
Smoking tobacco—From 18¢ a pound to 24¢.
Cigars—From \$2-\$13.50 a thousand, depending on resale price, to \$2.50-\$35.00.
Lubricating oil—From 4½¢ a gallon to 6¢.
Photographic apparatus—Film and plates from 10% of manufacturers' sales price to 15%; other photographic apparatus from 10% of manufacturers' sales price to 25%, exempting cameras weighing more than four pounds.
Telephone service—Local, from 6% to 10% of charge; long distance, a rate of 20% of total charge instead of a 5¢ tax on charges

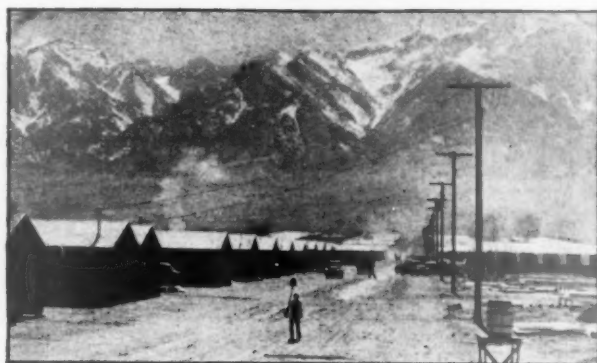
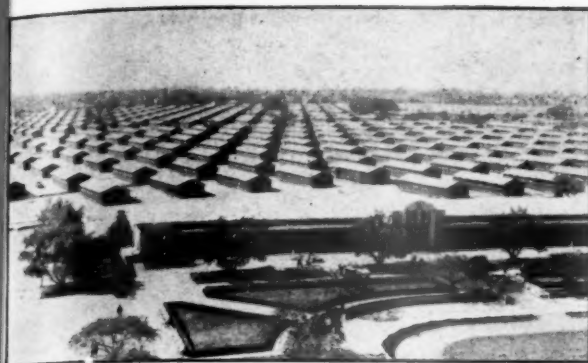
of 25¢ to 50¢ and 5¢ on each additional 50¢.
Telegraph service—From 10% to 15% of charge.
Transportation of persons—From 5% of amount paid to 10% of amount paid; similar increase in charges for seats and berths.

New Excise Taxes

Freight and Express—5% of amount paid; applies to both contract and common carriers.
Pari-mutuel wagers—5% of pool.

Excise Taxes Repealed

Commercial Washing Machines—10% of manufacturers' sales price.
Optical Equipment—10% of manufacturers' sales price.
Electric signs—10% of manufacturers' sales price.
Rubber articles—10% of manufacturers' sales price.



Typical of California's evacuation centers is the temporary establishment (left) at the Santa Anita Race Track or Manzanar (right) in the

shadow of Mt. Whitney where evacuees of Japanese ancestry are housed.

Business in Evacuation Centers

Big West Coast market shifts as 100,000 Japanese, two-thirds of them American citizens, are relocated. Housed, clothed and fed by government, they are also paid for project work.

Eddie Shimano, alert, young American-born editor of the "Pacemaker", a newspaper published at the Japanese Evacuation Assembly Center located on the Santa Anita race track near Los Angeles, likes to tell two stories that are going the rounds at the center right now.

The first goes this way: A Japanese-American was approached by a Caucasian truck driver who had entered the Santa Anita center on a delivery job. "Why don't you guys go back where you came from?" asked the trucker belligerently. "What!" exclaimed the Japanese in mock horror, "Go back to Iowa? No! No! Anything but that!"

The second is a remark made by a little Japanese-American school girl after she had been at Santa Anita several days. Said she: "Mother, I'm tired of living in Japan. When can we go home to Pomona?"

• **Essentially American**—Eddie uses these two stories to emphasize a point which seems to be the key to many of the business and social aspects of the vast resettlement job now in process on the West Coast, namely, that the great majority of the evacuees live and act habitually as Americans (which, actually, two-thirds of them are).

The social angles of the big trek have been quite widely reported but there are important (and highly interesting) developments of special concern to business which so far have been passed over in the rush for colorful "human interest" news.

• **How It Happened**—Here's a quick over-all picture of what's taking place. Under two agencies, Wartime Civil Control Authority and the War Relocation Administration some 100,000

American-born and foreign-born Japanese are being evacuated from strategic military areas defined by a series of proclamations of Lt. Gen. John L. DeWitt, commanding general of the Western Defence Command and the Fourth Army. They are being moved first to a dozen or so temporary assembly centers, like Santa Anita, operated by WCCA, and then to permanent relocation centers under the jurisdiction of WRA in California, Arizona, Idaho, Wyoming, Utah, Colorado, and Arkansas.

The evacuation is definitely not a part of the federal policy of enemy alien internment, and for that reason, both agencies scrupulously refer to their wards as evacuees rather than internees. The government feels that its charges,



Like newspapers published at other centers, the "Pacemaker" edited by American-born Eddie Shimano of Santa Anita assembly center, accepts no advertising.

having been displaced from their homes and businesses through no fault of their own are entitled to the best possible treatment. As for the evacuees themselves, they are philosophical—even pleased—about their lot, although naturally some of them feel that they are discriminated against as long as Italian-Americans and German-Americans in the strategic areas go free. These dissidents suggest that a good many Californians who have long fretted about the so-called Japanese problem are not displeased to see many thousands of their race removed a good many hundred miles outside the Golden State.

• **Getting Ready for Business**—Bulk of the evacuees are now in temporary assembly centers, and the permanent centers won't be fully populated until late fall. Three of the dozen centers planned are already operating. Four others are under construction. The rest are still virtually only paper projects. Approximately 70,000 of the evacuees now are in temporary assembly centers, 30,000 are in permanent relocation centers. Centers are located largely on Public Lands. Sites are suggested by WRA and are subject, of course, to Army approval. In buying private lands acreage is selected which will displace the least number of occupants.

• **A Shift in Markets**—Briefly, from a business viewpoint, what's taking place is that some 100,000 consumers have already been moved out of the general West Coast market and settled in a dozen new communities that will need practically the same goods and services as any average medium-sized western city.

In both the permanent relocation and temporary assembly centers evacuees are housed, fed, and clothed by the government. They have no interest in the property and pay no rent.

In one of his proclamations, Lt. Gen. DeWitt ruled that "evacuees will be given opportunity to work in the administration and maintenance of each center insofar as practicable and personnel will be rotated in different occupations with-

in each center." So in all the settlements the Japanese themselves act as traffic cops, firemen, newspaper publishers, chefs, dishwashers, waitresses, nurses, physicians, surgeons, barbers, school teachers, music teachers, athletic supervisors, and 101 other occupations necessary to the communities. As evidence of how complete and detailed is the civic service rendered at these settlements there are 20 nurses in charge of milk stations at Santa Anita where babies' feeding formulas are prepared for anxious mothers.

• **On a Business Basis**—All activities at the centers are, of course, supervised by representatives of the government agency in charge. Small manufacturing as well as agricultural projects will be undertaken with the hope that the centers will become largely self-supporting. The government will have title to all goods and produce yielded by these projects, for no private profit business is permitted in the center.

At Manzanar, relocation center in the Owens Valley of east central California, evacuees are operating a co-operative canteen and general merchandise store for their own benefit with a total "take" of about \$2,000 a day.

Under the name, "Community Enterprises", the store offers many of the items needed by the 10,000 occupants of the center. Stock includes cigarettes and tobacco, pins, needles, hairpins, toothpastes and mouth washes, cold cream, shaving cream, sanitary napkins, face and talcum powder, razors and blades, nail polish, lipstick, soap, cleansing tissues, nonalcoholic beverages, candy, chewing gum, cookies and crackers, canned fruit juices, and popular

proprietary as well as bulk drug products. Prices are all in line with those prevailing throughout the state. Profits will be pooled and distributed under a prorata plan to be worked out by the evacuees themselves.

• **Projects Are Set**—In Manzanar, also, the Japanese have planted 140 acres of vegetables, which will be used at the center. There's also a hog-raising project under which at least 400 porkers will be fed with garbage from the communal kitchens. More than 100,000 guayule seedlings are growing in lath houses and eventually will be transplanted outdoors in a rubber-production experiment. An ambitious reclamation program has also been laid out by the government. Evacuees at many of the permanent centers located in arid wasteland areas will work on irrigation projects designed to make the desert blossom like the rose.

Evacuees are paid in cash for their work at the centers, and they are permitted to bank such savings by mail. At the relocation centers they get \$12 a month for unskilled labor, \$16 for semi-skilled, \$19 for skilled or professional services. In addition, assembly center residents get coupons to be exchanged at center stores for simple items of personal use such as cosmetics, tobacco, candy and soda fountain products.

• **All on a Coupon Basis**—Coupons are issued on the following basis: \$2.50 a month for individual adults, \$4 for a married couple, \$1 a month for children under 16; no family receives more than \$7 a month. In addition to this basic allotment, other coupons can be bought for cash by evacuees. Money can't buy anything in a center; goods and services can be acquired only by coupon. Center



In a special "reading room" at Pomona Center where mail order catalogues may be consulted, Emiko Tsuboi (left) and Fumi Louise Annano compare Sears' summer styles with Ward's.

residents can order goods shipped on a C.O.D. basis and naturally these purchases are made in cash. All purchases for center stores are made through the Treasury Department's Procurement Office under contracts with vendors; stocks are selected by the agency in charge, whether WRA or WCCA.

The WRA plan for "furlough" employment under which evacuees may enlist for farm work in Idaho, Montana, eastern Oregon and Utah, outside the strategic areas on the Coast to ease farm labor shortages hasn't worked out so well and probably will be overhauled. As of July 10, only about 1,500 had enlisted. Apparently evacuees feel the inducement is small and that the government's obligations to volunteers haven't been defined precisely enough.

• **Sales by Mail Order**—Of particular interest to business is the fact that the evacuees already show a keen desire to continue buying their favorite merchandise both at the center stores and by mail. Most of the centers have a room where catalogs of Sears Roebuck & Co., and Montgomery Ward & Co. are on file along with order blanks; other mail order concerns can similarly arrange with center managers for placement of their catalogs. At the Pomona center (about 5,000 population) C.O.D. payments were running last week about \$3.50 a day.

Most of the centers have newspapers—usually mimeographed jobs—but they do not sell advertising space. Advertisers can, however, reach the evacuee market by direct mail, addressing him not by name but in much the same manner as rural boxholders are addressed—i.e., "Occupant, Apartment 2, Barracks 8, Manzanar Center." There is censorship but no limitation of the right to send or receive mail.

• **Arcadia Paper Shows Way**—The



Because stores at centers are the only places where evacuees may spend coupons furnished by the government

(adults get a \$2.50 book monthly; children, \$1.00), Coupons are now unofficial currency within each center.

HOT?



You call this hot? Why, soldier, folks up thisaway don't know *nothin'* about hot! I recollect one time, I was stationed at Fort Wotchamacallit in Texas. One day, along about noon, I seen a hungry coyote chasin' a scared jack-rabbit. And, sonny, it was that hot they was both walkin'.

Fertilized by a tradition of Bunyanesque exaggeration, tall stories and far-fetched yarns flourish like crab-grass in the soil of America's mind-challenging vastness.

But there is, as the man says, a time and a place for everything. And in the conduct of war, *accuracy* is as essential on the industrial battle-front as in the "greenhouse" of a Flying Fortress or the fire-control station of a battleship.

To achieve that accuracy, with the greatest possible speed and at the lowest possible cost, the Management of America's business and industry relies increasingly on Comptometer adding-calculating *machines*, and time-saving Comptometer *methods* — particularly in the figuring of costs and payrolls.

Felt & Tarrant Manufacturing Co., 1733 N. Paulina St., Chicago, Ill.

COMPTOMETER

REG. U. S. PAT. OFF.

ADDING-CALCULATING MACHINES

enterprising publisher of the Arcadia Tribune & News, F. Harold Roach, aware of the potential mail order business at the nearby Santa Anita center, began mailing late last month to each evacuee there a four-page newspaper in which the advertisements of a dozen local merchants included a mail order blank on which the evacuee was invited to list the goods he wanted.

The afternoon of the day the paper was distributed participating stores were flooded with orders. The Carruthers' Shoe Co. handled \$500 of business from the first issue (largely because Los Angeles high schools were holding exercises in the center for Japanese-American graduates). A listing of parasols brought a deluge of orders, for the California sun bears down on Santa Anita.

In general, the merchandise selected was about what any American man or woman would want—shoes, sports clothing, drugs, and candy. One merchant

sold 150 lb. of butterballs which he featured in his ad because he recalled that his Japanese customers always liked them. All in all, the first issue of the special edition brought about \$2,000 in orders to the merchants of Arcadia who now are planning similar issues for other assembly centers in California.

• **What It Costs**—Some idea of the cost of the evacuation process may be gained from the fact that the War Relocation Administration which handles the permanent centers is figuring on a budget of \$70,000,000 for the fiscal year beginning July 1. This doesn't include cost of the temporary assembly centers which, presumably, will be out of existence by late fall.

A figure of \$20,000,000 for food is one of the biggest items in the budget. To feed the 18,000 evacuees at the temporary Santa Anita center, the government figures on 70,000 lb. food a day. A single meal may require 5,000 lb. of rice, 5,200 lb. of hamburger, 5,600

lb. of cabbage, and 410 gal. of milk or 7,000 lb. of fish, 7,000 lb. of carrots, or 18,000 eggs. Bread order is likely to run about 100 tons a month. The sugar ration—one-half pound per person per week—is scrupulously observed.

• **Postwar Problem**—The after-the-war implications of these Japanese migrations to various points between the Mississippi River and the Pacific Coast are the subject of much business speculation. What will the Japanese do? Many who owned farms, city houses, or business properties have sold or leased them. Obviously, the temporary basis on which the relocation centers are being built won't permit the Japanese to take permanent root in them. The WRA figures that the problem isn't theirs right now, that it is their current function to look after the well-being of the Japanese (for a variety of very good reasons) by as efficient, humane, administration of the permanent centers as is possible under the circumstances.

WAR BUSINESS CHECKLIST

Washington's Significant Orders on Materials and Prices

• **Industrial Machinery**—Production, reconditioning, and sale of tire manufacturing machinery is forbidden (L-143) after July 19 except on specific approval. (Apply on form PD-552; producers must file PD-553.)

Plastics molding machinery may be produced and sold only for war agencies of this or allied governments or in accordance with PD-1 or P-19 ratings of A-9 or better or PD-3 ratings issued before July 4. L-159 permits application on PD-554 for approval of orders now on the books.

WPB approval is required, under L-89, for the manufacture of any elevator with other than single-speed control or with automatic doors as well as for changes in controls of any elevator and elevator equipment.

• **Spare Parts**—Users of auto replacement parts must turn in a used part to a distributor before receiving a new one, according to L-158. Superseding all previous orders, L-158 permits production of parts for medium and heavy trucks at 125% of sales in the same quarter last year unless inventories exceed a four month supply, in which case the maximum rate will be 75%. For passenger and light trucks, percentages are 70% and 50%. Eastern and central time zone distributors are restricted to a 60-day inventory, others to a 90-day.

Production of spare parts for track-laying tractors is limited, during the coming twelve months, to half of 1941 production of tractors and parts combined. Manufacturers may sell only to Army, Navy, Maritime, and authorized distributors or for export.

• **Refrigeration**—Order L-126 provides

for issuance of schedules setting specifications for industrial and commercial refrigeration and airconditioning equipment. First two schedules reduce the number of types of water coolers and of refrigerator condensing units and compressor bodies.

• **Textiles**—Manufacturers and wholesalers prices of suits and overcoats are rolled back by Regulation 177 to the prices prevailing in the months preceding November, 1941, plus specified percentages representing cost increases. Similar base is established for retail sale of topcoats and overcoats. A January-February (1942) base for suits and September-October for overcoats is imposed on the made-to-measure trade.

Sellers of summer-weight men's and boys' clothing may not introduce new lines at higher prices than those established under Regulation 142, amended.

Revision of Schedule 39 (upholstery fabrics) extends its provisions to manufacturers' and converters' prices of all types of woven decorative fabrics, whether or not used in upholstery. Other technical changes are made.

Definite prices for wide print cottons and several other cottons are established by amendment 5 to Regulation 118 which makes various technical changes also.

Hosiery mills are to be granted their full allocation of rayon yarn under M-37: even though they scrap some of their machinery.

Amendment of M-123 permits sale of asbestos textiles for brake linings and clutch facings without a priority rating.

• **Fur**—Prices of women's fur garments in the coming season are limited by

Regulation 178 to prices charged for similar garments last season.

• **Paper**—Grades, colors, sizes, and weights of most kinds of paper which a manufacturer may produce are limited by Order L-120.

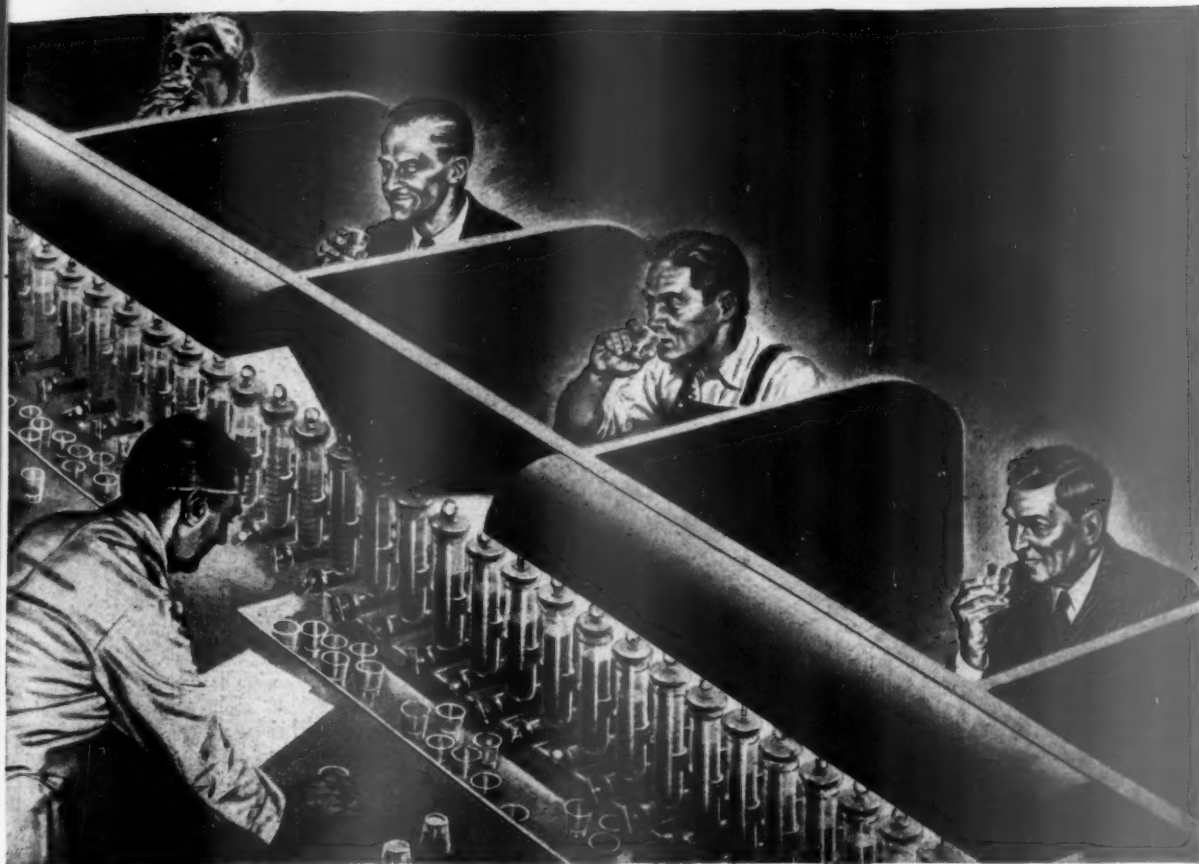
• **Glass**—Specific manufacturers' prices for rolled and wire glass are established at the levels of last October by Regulation 175, which generally conforms to existing voluntary agreements.

• **Lumber**—Prices of southern hardwood box-grade veneer are limited to December-January levels by Regulation 176. Prices of box-part finished sizes are set at cost of material plus markup in effect last October.

• **Inventories**—Priorities Regulation 13 establishes regulations for sale without specific WPB approval of materials frozen in inventory by previous limitation orders. Certain listed materials may be sold to government agencies and certain other classes of buyers. Materials not listed may be sold in normal fashion.

• **Applications**—Applicants for PD-1A priority ratings may enclose a self-addressed postcard with their application and will be notified of the case number assigned it to facilitate subsequent inquiries if action is not taken within two weeks.

• **Exports**—Technical changes in administration of the ODT rules on shipment of goods to ports are effected by issuance of General Order 16, which supersedes instruction No. 1.



The Jury whose verdict we never appeal

IF YOU were to visit any of our five great distilleries, you would be invited to serve on perhaps the most unusual jury ever impaneled. Its sole function is to pass judgment on Calvert whiskies.

Its members number thousands of people from every walk of life and from every corner of the land—a true cross section of the American taste. Not a whiskey “expert” is among them—yet their verdict on Calvert whiskies is absolute and final.

For this vast Consumer Jury—which has no counterpart in the distilling industry—literally dictates the kind of whiskey we make.

We have learned from poll after poll, for example, that our *more highly refined* whiskey rates higher

in preference than any of our other whiskies. So we make only highly refined spirit blends—even though it costs us more to produce this type of whiskey.

We have learned that the most minute differences in taste, aroma, even color—can sway the palate’s verdict. So we submitted actually *hundreds* of different blends to our Consumer Jury—before we arrived at the Calvert blends you know today!

In short, Calvert whiskies don’t just happen. They are purposely blended to please the American taste.

Fortunately, we are in a unique position to produce such blends. For we own the world’s largest stock of fine, matured whiskies. And we have

the greatest treasure of costly neutral grain spirits ever assembled... the key to delicacy of flavor.

With these almost limitless resources to draw on, plus an accurate yardstick of public preference, our blends should be rewarded with success. And they have been.

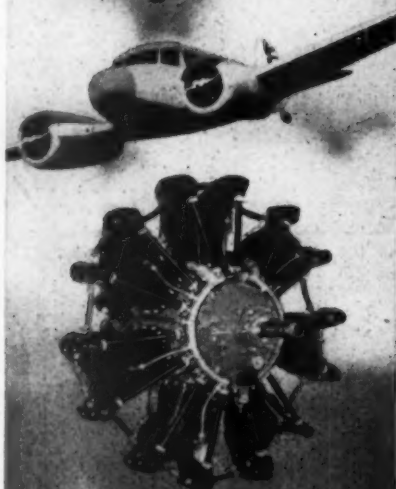
It is a matter of record that more people buy Calvert® than any other luxury whiskey in America.

Calvert

The Institute
of Blends

Calvert Distillers Corp., N. Y. C. BLENDED WHISKEY 86.8 Proof. *Calvert “Special”: The straight whiskies in this product are 4 years or more old. 27¼% straight whiskies, 72¼% grain neutral spirits. Calvert “Reserve”: The straight whiskies in this product are 5 years or more old. 35% straight whiskies, 65% grain neutral spirits.

Training the BOMBER PILOTS



JACOBS AIRCRAFT Engines

Bomber pilots of the United Nations are receiving their advanced training on planes POWERED BY JACOBS—with engines economical, smooth and dependable.



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AIRCRAFT ENGINE CO.
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Truck-Pooling

ODT soon will be clearing plans for sharing freight and equipment. Group in Philadelphia is providing a case study.

By Aug. 1 the Office of Defense Transportation expects to be clearing plans submitted by truckmen to establish joint arrangements for interchange of freight and equipment. This method of enabling common, contract, and private carriers to operate efficiently within the 75% return load and other truck and tire conservation measures imposed by ODT (BW—Jun. 6 '42, p. 48) was authorized by General Order 13, effective July 2. Pooling of information about trips and facilities is likely to be accelerated by this week's ODT ruling lifting the 75% return load requirement if "due diligence" is exercised by truckers in checking to obtain capacity loads.

• **Cooperation**—Common clearance of information regarding freight and equipment available in a given area has been a rather frequent practice in the trucking industry, particularly among household movers. Many more "pooling" plans have sprung up all over the country in an effort to cope with ODT restrictions.

In principle, this is regarded as all to the good by ODT. Its Order 13 is designed to step up efficiency of truck operations by this means but at the same time to apply supervision. ODT wants to be sure that such joint operations are not merely a cloak for racketeering or for discrimination against one carrier by others.

• **Information Service**—The joint information offices set up by carriers under Order 13 will be required to give data on available equipment and freight to any carrier requesting such service. Costs of opening and maintaining the joint offices are to be shared equitably by the participating carriers. Charges assessed to carriers for services rendered are subject to change by ODT.

The information office will not have power to fix compensation for the interchange of property or the rental price of vehicles, nor to lease equipment or assign traffic to specific carriers.

• **Dividing Revenue**—The ODT may determine divisions of revenues between carriers for interchange of freight and compensation for equipment rentals unless these are fixed by agreement between the carriers, by the Interstate Commerce Commission, or by state regulatory authorities.

Among many plans for which ODT's official sanction under Order 13 has been asked is one operated since May 29 in Philadelphia by a group of truck-

men banded together as the Transportation Exchange.

• **How It Works**—The exchange, which boasts 250 active members and that many more on a waiting list, is actually an amplification of the Motor Carriers Service Bureau, headed by James H. McGurk, Jr., tariff expert and trucking mentor. McGurk organized the new exchange and is its unpaid president. Exchange headquarters are in the bureau's offices. Here are the mechanical operations:

Three carriers, each booking part loads, say to Baltimore, report to the exchange. One of the three may transport the load, and pay the others a commission on the surrendered loads. A fourth carrier may do the job on the same basis, and a return load is sought to make the trip pay.

In another instance, a carrier reports a full load going to Cincinnati, but does not have a certificate to permit him to make the trip. The exchange obtains a certified carrier to haul the cargo, the booking carrier gets a commission.

• **Evasion Possibilities**—Since the trucker carrying the load gets the lion's share, McGurk has set up a schedule of rotation to prevent cries of favoritism or discrimination, but admits that neither he nor the ODT has any way of checking up on boys who get out of line and run fat paying loads without reporting. Only check against such violators is that they take the chance of coming back empty if they do not inquire of the exchange at their delivery points or at towns along routes for return cargoes.

Fly in McGurk's ointment from ODT's standpoint is the rate and commission schedule. The order states that the joint information offices do not have the right to fix compensation, or assign traffic to specific carriers. McGurk's rate schedule, apparently approved by the exchange's members, is quite definite.

• **Exchange Fees**—When a load consists of household goods, 70% of the transportation charges go to the working carrier, 20% to the booker, and 10% to the exchange for expenses. When the exchange does the booking it collects 20%, but will pay out 10% where a lead is given in by a carrier. The compensation and commission in freight handling vary, but the exchange's charge is a fixed 5%.

The exchange has a paid manager and two girl clerks, handles the mailing of bills of lading and freight slips, and complains that the deductions are hardly enough to cover expenses.

• **Widening Out**—Daily bulletins of part loads originating in Philadelphia and vicinity are being posted for the membership, and similar agencies in other cities, including Pittsburgh, Atlantic City, New York, and Milwaukee, are reported being drafted into the scheme.

READY TO ROLL

—in a 1500 ton squeeze!

Giant cylindrical roller bearings like this take 1000-1500 ton loads in the production of high-strength aluminum sheets for war planes.

These precision bearings fight friction and call for efficient lubricants. Texaco supplies them — to all industry — from more than 2300 wholesale supply points in the United States.

To assist you in the selection and economical application of its petroleum products, Texaco offers you the services of trained Lubrication Engineers.

THE TEXAS COMPANY

*—in all
48 States*





Carey

HEAT INSULATIONS

DRAFTED FOR WAR SERVICE *in largest* POWDER PLANT

In one of the nation's mammoth powder plants, CAREY Heat Insulations are rendering vital service—aiding in the efficient and economical production of explosives for our armed services.

The insulation requirements for this project included many miles of pipe covering for outside lines ranging in size from $\frac{1}{2}$ " to 30" in diameter, and additional miles of insulation for inside lines. Apart from the piping, numerous other pieces of processing equipment—stills, vapor columns, condensers, concentrators, etc.—required adequate insulation.

In hundreds of plants throughout the nation, CAREY Insulations are helping industry win the battle of production. Their high efficiency; their ability to withstand extreme temperatures and pressures; their toughness and durability; their variety, covering all service conditions; are qualities known to leading engineers the country over. For details, address Dept. 29.

*Whatever your insulation requirements,
you're SAFE with CAREY. A nation-
wide organization is at your service.*

THE PHILIP CAREY MFG. COMPANY • Lockland, Cincinnati, Ohio

Established Products Since 1893
IN CANADA THE PHILIP CAREY COMPANY LTD. Office and Factory LENOXVILLE P. Q.

The Philadelphia chapter of the Pennsylvania Motor Truck Assn. had leased an office as an information-pooling center when ODT's first conservation orders were issued. The plan was dropped when the issue became muddled by new orders but with issuance of General Order 13 the local chapter is again picking up the pieces and formulating a new plan to compete with Transportation Exchange.

● **Holdout Element**—McGurk declares his organization is putting idle trucks to work, cutting long-haul labor costs by furnishing extra men along routes, and arranging packing and storage at distant points. But he admits that getting the "deluxe" haulers into the pool is a tough nut to crack.

The fancy, high-priced movers of household goods seem willing to pool small part loads, especially those destined for long distances, but are holding tight to the profitable short hauls. The little fellows, though, can still make money from what's left over. Last week one trucker hauled an unwanted load of furniture to Maine, then picked up a nice piece of change by driving over to Vermont and returning with a whopping big cargo of marble.

U.S. BUYS BARGES

The Maritime Commission will order 50, 100, maybe 200 big ocean-going wooden barges on bids received from 24 contractors in 12 states. This does not, however, give immediate support to rumors that the commission is planning to build thousands of these barges for European invasion use. The barges the commission is contracting for are capable for such use, however, and the commission also has under construction 33 ocean-going tugs.

● **Other Barges Go Abroad**—The Commission now is delivering on lend-lease 500 smaller wooden barges for use abroad. These are being shipped knocked down. The commission says only that the big barges will be used for bulk freight—oil, grain, sugar, lumber, and the like—on coastal and intercoastal routes.

In home waters, the barges will help to overcome the shortage of shipping space caused by submarine and mine sinkings. They will be particularly useful in running in supplies of off-shore sugar and oil from the Gulf. Oil tankers can haul a barge, thus materially increasing deliveries.

● **Wide Range of Bids**—The ocean-going barges are to be 274 feet long, will have a draft of 20 ft. 6 in. and a dead-weight tonnage of 3,750. The commission is calling for delivery of the first barge within 210 days and the last within 390 days from date that contract is awarded.

Bids ranged from \$339,584 to \$980,000 per barge on an "adjusted price"

basis and from \$373,542 to \$984,600 on a "fixed price" basis.

The new barges will be too big for use on inland waterways. For building more barges on inland waterways Congress recently earmarked \$20,000,000 of Maritime Commission funds.

Lightweight Diesel

Big postwar field seen for new unit announced by Navy and G.M. Two-thirds smaller, it develops same horsepower.

Because the basic problem in their industries is to haul more payload and use less of the available space and power for hauling dead weight, railroad motive-power engineers and highway truck designers pricked up their ears last week at a joint announcement by the U. S. Navy and General Motors' Electro-Motive Division.

• **Same Horsepower, But—**The official news releases stated that Electro-Motive is in full-volume mass production of a new high-speed, high horsepower, lightweight diesel engine only one-third the size of the best previous diesels of the same horsepower. Obviously, these power plants will not be available for locomotives or over-the-road tractors while the war lasts, but they carry promise of major importance once they can be released for civilian service.

For military reasons, details of the new engine are left pretty vague, but the outlines are definite enough to indicate that this design is radically different from the conventional. This conclusion is borne out by the only picture released (page 28).

• **Flat Construction—**Navy men call the new Electro-Motive product a pancake engine because of its flat construction. Its 16 cylinders are grouped around a vertical crankshaft in four banks of four cylinders each. For marine applications, it is combined with a variable pitch propeller. The engine, reduction gear, and propeller pitch control are designed as a complete unit using a bevel pinion and gear between the engine and propeller shaft.

The propeller can be reversed by the pitch control mechanism, hence there need be no provision for reversing the engine or providing reverse gears for the propeller shaft. This saves weight and space.

• **Sought by Navy—**The Navy admits that ever since 1917 it has been actively looking for this type of diesel engine performance. In 1938 the problem was tossed into the lap of G.M.'s research laboratories at Detroit. Here it was researched along with a project for the reversible propeller. The engine design was approved by the Navy early in 1941,



"AND DON'T FORGET...
PHILLIPS SCREWS COST LESS TO USE!"

Rapid Driving • No Slipping • Better Holding = 50% Less Assembly Time with Phillips Screws

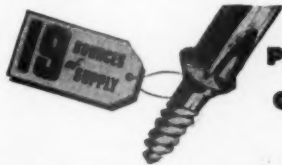
Here's the formula for doubling fastening schedules: Replace slow-driving slotted screws and awkward hand-driving methods with Phillips Recessed Head Screws and pneumatic or electric drivers. Phillips screw and driver fit as one, making easier, fumble-free driving with no danger of driver slipping from recess to mar surface or cause injuries.

Slotted screw bottlenecks — crooked screws — split heads —

burrs — all the slotted screw headaches that waste so much time and effort are eliminated. Work goes smoothly when you replace snail-paced slotted screws with lightning-fast Phillips screws.

You'll discover you get 2 hours work done in one — with a 50% saving in cost as well.

Contact companies listed below for further facts.



PHILLIPS RECESSED HEAD SCREWS
GIVE YOU *2 for 1* (SPEED AT LOWER COST)

WOOD SCREWS • MACHINE SCREWS • SHEET METAL SCREWS • STOVE BOLTS • SPECIAL THREAD-CUTTING SCREWS
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American Screw Co., Providence, R. I.
The Bristol Co., Waterbury, Conn.
Central Screw Co., Chicago, Ill.
Chandler Products Corp., Cleveland, Ohio
Continental Screw Co., New Bedford, Mass.
The Corbin Screw Corp., New Britain, Conn.
International Screw Co., Detroit, Mich.
The Lamson & Sessions Co., Cleveland, Ohio
The National Screw & Mfg. Co., Cleveland, Ohio

New England Screw Co., Keene, N.H.
The Charles Parker Co., Meriden, Conn.
Parker-Kalon Corp., New York, N.Y.
Pawtucket Screw Co., Pawtucket, R.I.
Phoenix Manufacturing Co., Chicago, Ill.
Russell, Burdall & Ward Bolt & Nut Co., Port Chester, N.Y.
Scovill Manufacturing Co., Waterbury, Conn.
Shakeproof Inc., Chicago, Ill.
The Southington Hardware Mfg. Co., Southington, Conn.
Whitney Screw Corp., Nashua, N.H.



HERE are two kinds of SKILSAW SANDERS, both widely used in War Production plants, both widely preferred for "final-finish" surfacing of wood, metals and compositions because they're more powerful, easier to handle and (most important) because they're FASTER!

SKILSAW BELT SANDERS are for flat surfaces... for all finishing and refinishing work, removing scale, paint and varnish, sanding and polishing. 4 Models. Belt widths 2 1/4 to 4 1/2 in.

SKILSAW DISC SANDERS are used on either flat or curved surfaces for all grinding, filing, metal cleaning, sanding, polishing and buffing. 6 Models.

Whatever your surfacing problems may be, take a look at these SKILSAW SANDERS. Your distributor will gladly show why users everywhere say, "SKILSAW SANDERS make every man and every minute count for more."

SKILSAW, INC., CHICAGO
Sold by leading distributors of hardware and industrial supplies



SKILSAW
9 Models



DRILLS
23 Models



DISC SANDERS
6 Models



BELT SANDERS
4 Models

ALSO BLOWERS
HAND AND
BENCH GRINDERS
FLOOR SANDERS

SKILSAW
PORTABLE ELECTRIC
TOOLS

MAKE AMERICA'S HANDS
MORE PRODUCTIVE!

and Electro-Motive was designated as manufacturer. By the end of 1941, the new engines were in pilot production in an addition to the Electro-Motive locomotive plant. Since May, 1942, the production rate has kept pace with Navy requirements.

The successful elimination of previously accepted weight and space requirements makes the new power plant what is believed to be the lightest weight ocean-duty diesel in the world. How these savings were achieved is restricted information.

• **Used on Sub-Chasers**—Two of the new engines power the 110-ft. PC sub-chaser, adding materially to cruising radius through greater fuel capacity, greater speed through higher power, greater maneuverability through added flexibility of power transmission, and heavier armament through use of space and weight formerly required for the boat's engines.

The variable pitch propeller is said to operate on a principle not greatly different from the variable pitch airplane propeller. Changing the pitch of the propeller blades changes their bite on the water, thus permitting slowing, speeding, or reversing the motion of the boat without changing the speed of the engine. Navy men say that the new power plant with its special propeller permits stopping or turning sub-chasers on a dime. Mass production of this power plant is hailed as a major advance in the campaign against submarines on the East Coast.

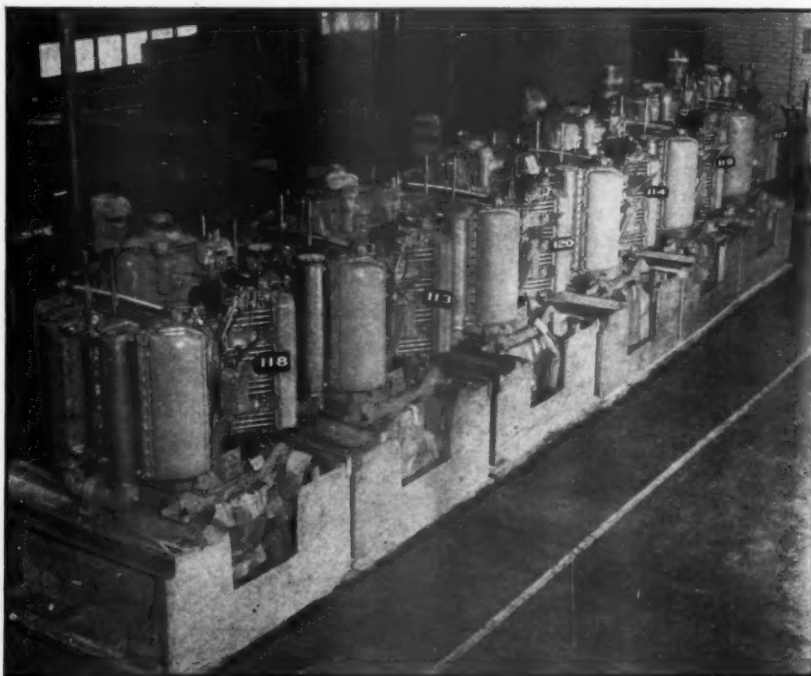
Parts Repriced

Automotive firms welcome OPA's changes in Regulation No. 136, but see trouble ahead—with wages, for instance.

Price ceilings on machines and parts go into effect July 22 under a new and substantially revised Maximum Price Regulation No. 136 (BW—May 16 '42, p26). This regulation, however, revamped as it has been to meet industry objections, gives only passing comfort to the concerns involved. In an immediate tomorrow they foresee weighty problems, many interwoven with conflicting philosophies of price-fixing.

• **A Spring Crisis**—Regulation 136 had all the effectiveness of a delayed-action bomb when it was issued by OPA's Machinery Section last spring, fixing machinery at the price levels prevailing last Oct. 1. A week or so passed before someone discovered that "machinery" meant automotive parts (BW—May 23 '42, p74), even certain radio equipment, as well as prime movers, processing machinery, construction, rail and electrical equipment, other heavy goods.

Loud squeals went up, particularly from the automotive parts makers and other consumer goods suppliers. Their arguments were evidently logical, for Leon Henderson granted that the machinery price-fixing job had not been



"PANCAKE" POWER

General Motors' new "pancake" diesels aren't exactly insignificant, but

six of them in a shipping room take up a lot less space than old style diesels would—two-thirds less to be precise.

"Set 'er for 20,000 feet, Jim . . . and when Fritz comes over you'll knock him down."



Air Conditioning makes it hot "Upstairs"

Jimmy's brother is a sergeant in an anti-aircraft outfit. Let him tell you what air conditioning means to the crew of an "ack-ack" battery in action.

The height of the curtain of steel which our boys put up against enemy planes depends on split-second timing of the fuses in the shells. Carrier Air Conditioning helps to make those fuses deadly accurate.

If the powder in a fuse is too dry, it burns too rapidly—the shell explodes too soon. If the powder is too moist, the shell over-shoots its mark. Carrier

Air Conditioning keeps the right amount of moisture in the powder during manufacture and loading of the shells.

Helping quantity-with-quality production in vital industries by controlling shop temperatures and humidity is a major Carrier war-time assignment.

But the day is coming when air conditioning will no longer be a weapon . . . when this great industrial tool will help unfold a world of new products—for peace.

Carrier Corporation, Syracuse, N. Y.



The Navy "E", one of the U. S. Navy's most coveted honors, was awarded to Carrier Corporation for excellence in war production.

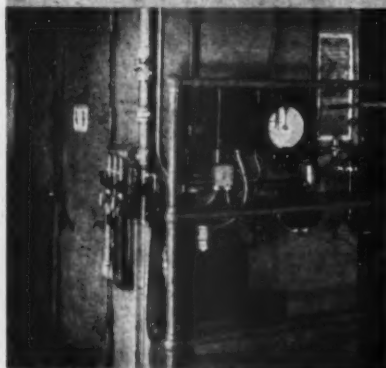


GREEN HANDS

perform production "miracles"!



Even new-trained workers can get high, uniform output from finishing ovens with Foxboro Temperature Control.



In aviation gasoline plants, Foxboro Control Systems enable operation of entire processes from a central control room.



NEVER before have industries been called upon to produce on today's vast scale, with such a high proportion of inexperienced employees. Yet, virtual production "miracles" are being performed daily, because of instrumentation that enables "green hands" and "old hands", alike, to produce smoothly, accurately, at record speed!

Through Foxboro Precision Measurement and Control Systems, operation of many most-exacting processes is reduced to simple routine. Accurate measurements of process conditions—clearly indicated at all times—give exact guidance to the operators. Continuous records aid both the operators and supervisors. And fully automatic control on many jobs produces quality and quantity of output that's impossible with manual control.

Learn how Foxboro Instruments can relieve your "green hand" troubles on any operation requiring controlled Temperature, Pressure, Flow, Humidity or Level. Write us your specific problem. The Foxboro Company, 120 Neponset Ave., Foxboro, Mass., U. S. A.

FOXBORO

Reg. U. S. Pat. Off.

MEASUREMENT AND CONTROL SYSTEMS

done thoroughly. He suspended the effective date of the order from May 18 to June 1, and then from June 1 to July 1, and in the meantime a new order was drafted.

• **Three Categories**—The revised version meets many of the objections by dividing up the goods to be price-regulated into three groups. The first group, largely capital and heavy goods, is set at last October's levels. The second is regulated at Mar. 31, 1942, levels, and includes a miscellany of products as well as subcontracted parts not specifically included in the other sections. The third, primarily consumer goods, goes under the General Maximum Price Regulation, and therefore becomes fixed at the highest March levels.

By obtaining classification for their output in the third group, the auto parts makers won a point. And inasmuch as the new order exempted military contracts from the price ceilings, the automotive industry, large producer in those fields, also appeared to have gained ground.

• **More Fluid Price Basis**—An improved and clarified formula for pricing is set up applicable to goods without list prices last October—thereby including parts on which specifications have been changed. Some flexibility is available in computing costs. For example, if more machine or man-hour time becomes required on a part, the price can be increased accordingly. If overtime becomes required, the extra charges are allowable.

Notable, too, is the change in the system of passing along increased costs from subcontractor to subcontractor. Originally if a cost increased somewhere along the line, it had to be absorbed. Now it can be used as part of the basis for the price-fixing formula, right along the subcontracting line up to and including the prime contractor.

These changes are welcomed, and industry representatives give full credit to OPA for digging into a most difficult job and coming up with them. But the big fears about Regulation No. 136 are in the haze of tomorrow's dawn.

• **Pay Raise Ripsaw**—Suppose, for instance, that the wage rate structures of the machinery and parts makers go up, as is being considered now in the National War Labor Board cases of the three major automobile companies (BW—Jul. 4 '42, p. 75). Regardless of any such changes, labor costs have to be figured on last October's basis.

In one sense, therefore, OPA has given manufacturers a weapon with which to go before NWLB and justify arguments against pay raises. But NWLB may already be taking counter-measures. Such is the management interpretation on the "ability to pay" reasoning in the subcommittee report favoring a wage jump in Little Steel (BW—Jul. 11 '42, p. 16). This part of the report

was regarded as advance rebuttal to company arguments citing the inflexibility of wage costs in computing prices from here on.

● **Overhead Fixed**—There is a potential snag, too, on charging of overhead for such goods. Overhead must be computed on the unit cost basis in effect last October, or which would have been in effect had production been under way. So far so good. But suppose a manufacturer, having made up his overhead schedule, has his contract cut in half by a change in War Department strategy. His overhead marches on.

● **Battery Short Circuit**—The really spanked and smarting children of the automotive family under No. 136 are the storage battery makers. A scant few of them agreed voluntarily to fix prices at the October ceiling. Some 100-odd others refused. But the new order followed the minority, placing all storage batteries back at last autumn's levels. Sparks are flying on the battery front, but OPA gives no indication of changing its mind.

For these and other cases, No. 136 provides possible balm. Individual companies can appeal for relief under OPA Procedural Regulation No. 6. Pending determination, the company can sell at the price it deems proper, but must be ready to refund if the appeal is decided adversely.

Industry is dubious about this procedure, envisaging an intolerably long lineup of cases which will either be won, disrupting the price structure, or be lost, disrupting companies which would then have to refund balances, perhaps after years of uncertainty.

● **More to Come?**—As if the already existing quandaries of the machinery and parts field were not enough by themselves, OPA announced plans to set up ceiling regulations on military vehicles and aircraft, specifically exempted from No. 136. Hearings on these have already reached closing stages.

Most of today's operations by automotive parts makers involve such military production, and the field is also occupied in varying degree by the machinery manufacturers. So, until the new orders are issued, or until decision is made not to issue them at all (a fair possibility, some believe) they impose a brand-new imponderability in an area of many imponderables.

For the most part, the proposed vehicle and aircraft orders tally fairly closely with the framework of No. 136. OPA has suggested, however, that a clause might be inserted to include cost plus contracts under price ceilings. This suggestion is bewildering industry representatives, for they always conceived cost plus jobs as allowing for variations in manufacturing of strange and sometimes unknown character, and they see intense difficulty in any application of ceiling prices to such work.



NEW CONTROLS for Today's Production

In these feverish days of war production, with plant output and personnel greatly expanded, management faces new complexities all along the line. Excessive inventories, lagging operations in certain departments, confusion among workers because of inadequate instructions, failure to make delivery dates—these are but a few of the new burdens thrust on management. Control—enlightened, planned control—is imperative!

The John J. Plocar Company, by

its wide experience, is prepared to bring to Industry the type of management control which is geared to the present emergency. Through careful analysis, Plocar Company service develops practical methods of management fitted to your particular problems—points the way to more efficient and profitable production.

Delays are costly! Phone, wire or write now for an explanation of the Plocar Company method for diagnosing your problems.

Plocar Company Clients include:

The New Britain Machine Company . . . New Britain, Connecticut
A. G. Spalding & Bros, Inc. Chicopee, Massachusetts
The Milford Rivet & Machine Co. Milford, Connecticut
The Griest Manufacturing Company . . . New Haven, Connecticut
Contract Plating Company Stratford, Connecticut
Connecticut Telephone & Electric Corp. . . Meriden, Connecticut
The Sparks-Withington Company Jackson, Michigan
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Representatives in Principal Industrial Areas

BUSINESS AND INDUSTRIAL MANAGEMENT CONSULTANTS

168-HOUR WEEK FOR

OUTMODED WIRING SYSTEMS CAN'T STAND TODAY
MODERN BUS DUCT MEETS THE NEEDS OF ROUND-THE-
CLOCK PRODUCTION CHANGES . . . LOW INSTALLATION



America is winning—but has not yet won—its race against time.

Shipping platforms tell an encouraging story of war production, but the progress of the job must still be measured in terms of time.

Round-the-clock, round-the-calendar operation of machine tools calls for an electrical system that will stay on duty a *full* 168 hours *every* week. War plants can't afford to gamble on a single "if."

THESE, IN BRIEF, ARE BULLDOG'S CHIEF ADVANTAGES

Power and light where they are needed, when they are needed.

System can be installed in new plants without waiting for machine layout . . . and machines can go to work as soon as the roof is on.

Tool set-ups can be changed—machines shifted—with no interruption of light or power.

Power operates at higher efficiency, with less voltage loss, than in any other system.

The Bulldog Electric Products Company has designed its flexible power and lighting systems with every wartime consideration in mind—*efficiency* of operation, *speed* of conversion, *economy* of critical materials, *protection* against breakdown and sabotage, *saving* of installation time, *safety* of life and property, *cost* of maintenance.

Power and Light "Stripped for Action"

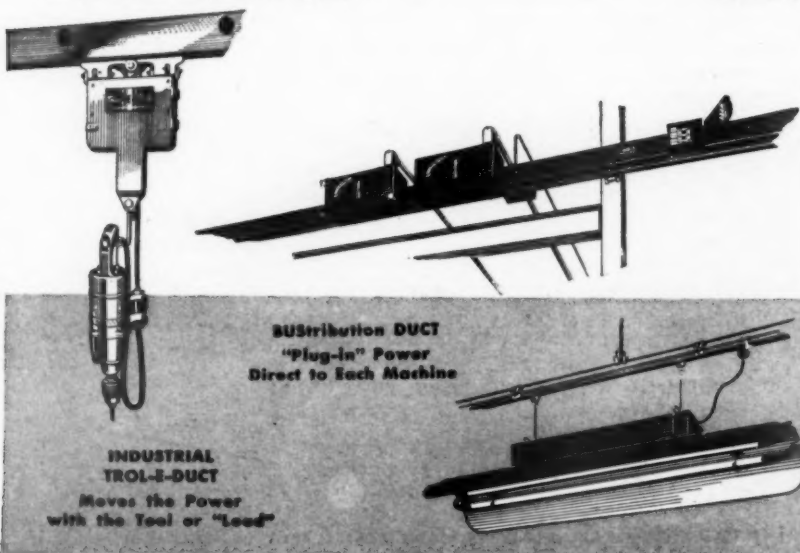
Who is to say which of these advantages is most important? It is our belief that *all* are vital.

An enclosed electrical system, protected against breakdowns, sabotage, accidental short circuits.

System is engineered for maximum efficient use of critical materials. Eliminates need for rubber and aluminum.

Installation in a fraction of the time required for old-fashioned wiring, with a big saving of engineering time for layout.

Standard, interchangeable sections—100% salvageable. Instantly convertible from one production set-up to another.



INDUSTRIAL
TROL-E-DUCT

Moves the Power
with the Tool or "Lead"

DISTRIBUTION DUCT
"Plug-In" Power
Direct to Each Machine

BULLDOG
ELECTRIC PRODUCTS CO.

DETROIT, MICHIGAN

Bulldog Electric Products of
Canada, Ltd., Toronto, Ontario

Field Engineering Offices
in All Principal Cities



UNIVERSAL TROL-E-DUCT
Plugs in the Lighting As
and Where Needed

BULLDOG "PLUG-IN" SYSTEMS—THE ARTERIES THAT

D POWER AND LIGHT

DAY WARTIME PACE! . . . ONLY
-THE CLOCK OPERATION . . . QUICK
TION AND MAINTENANCE COSTS

industry is to reach its victory production goal.

It was because old-fashioned wiring methods could not meet the requirements of modern manufacture that Bulldog pioneered the first bus duct systems many years ago. They are engineered for mass production by mass production experts—and are built by mass production methods.

The same needs that made these systems standard in normal times have made them doubly valuable in this emergency. *An hour saved today may well be worth a month in '43.*

Bulldog "Plug-in" Power Is an Integral Part of the Machine Tools It Serves

"Just a ten-minute job!" That's all the time it takes to hook up the power for any one of the machine tools in the great aircraft engine plant shown below. And hooking up or rearranging a whole battery of machines, or an entire production line, is equally simple and correspondingly quick.

For Bulldog BUStriction DUCT is designed to be an integral part of the machine tools it serves—ready to go on the job at a moment's notice—instantly adaptable to any shift or rearrangement in production lines.

No delays, no lost production time, no other machines down while any one of them is being moved into or out of the line. Power where you want it, when you want it . . . and engineered to save.



AT SUPPLY POWER AND LIGHT FOR WAR PRODUCTION



Driving a pipe line through fields, swamps and forests is a race between time and America's war needs: 100-octane gasoline... raw stocks for rubber... fuel for all-out production. These urgent responsibilities of the petroleum industry are also responsibilities of Yellow Strand Preformed Wire Rope. For rope-wise contractors and producers know how the *highest grade* line helps them get quick starts and early completions—on rotary rigs, pipe-laying jobs, heavy refinery lifts.

Fortunately, peacetime Preformed Yellow Strand takes over wartime duties without change or delay. The same stamina that withstands logging, dredging and mining hardships is suited to triple shifts in shipyards, arsenals and bomber factories. Its combination of flexibility and toughness stoutly resists abrasion, kinking and fatigue, whether the cable-using equipment is building roads, dams, airports or docks.

You earn and give right-of-way for essential Victory production by conserving men, machines and materials. Let *long-lived* Preformed Yellow Strand speed your output... put off replacements... save steel for tanks, ships and planes. Get in touch with any office, branch or distributor.

BRODERICK & BASCOM ROPE CO., ST. LOUIS

Branches: New York, Chicago, Houston, Portland, Seattle. Factories: St. Louis, Seattle, Peoria

**YELLOW
STRAND**

Preformed WIRE ROPE



A Mainstay of National Defense, Through Its Service to
ROTARY DRILLERS • ROAD BUILDERS • GENERAL CONTRACTORS • PLANT ENGINEERS
LOGGERS • MINERS • QUARRY OPERATORS and OTHER INDUSTRIAL SERVANTS

Plants for Storage

Idle factories and other buildings in Philadelphia are enlisted by warehouse pool as regular space is exhausted.

With regular warehouses jammed to the ceiling with Army, Navy, and lend-lease goods, storage men in Philadelphia have begun to break the log jam by adding idle plants and buildings of priority-stricken manufacturers and distributors to their pool.

The Philadelphia pool, made up of 11 warehouse concerns banded together in a Federal Emergency Warehouse Assn. has been operating along the same line as the Kansas City pool (BW—Apr. 25'42, p55) for two months. In that time it has filled up virtually all of the 4,500,000 sq.ft. of storage space in the 50 warehouses, not including those for grain and cold storage, which the Quaker City pool controls.

• **Two-Way Aid**—The new move, enlisting empty factory and store space, has the blessing of the Office of Defense Transportation. It is expected to yield two benefits:

(1) Makers and distributors of consumers' goods, worried about overhead and taxes on space they no longer need, can realize enough from rentals to keep their heads above water for the duration, provided their buildings are suitable for storage use.

(2) The warehousemen are happy as Punch over the arrangement because if adequate makeshift storage can be provided until the war's end it will stymie any government warehouse construction, thus preventing surplus space with the resultant threat of price-cutting when peace comes.

• **Lease Approval**—ODT has already approved the pool's recommendation for leasing a hardware distributing house, containing 175,000 sq.ft., and is studying the specifications of another plant, owned by a metal specialties concern, now fallen on lean days, which will add another 367,000 sq.ft. if accepted.

There is scant red tape in the procedure by which the pool expands to embrace the unorthodox storage facilities. The Warehousemen, given carte blanche on the meting out of space and providing all facilities for loading and unloading, have only to report to ODT that space is becoming tight, then recommend a certain structure as available and suitable.

• **Safe Monopoly**—If the rent asked is within reason, the ODT signs the lease and throws the building into the pool. The buildings under government contract are then operated by the association at nominal fees, and any accrued profits are split with Uncle Sam.

N. Y. Hunts Work

Hard hit by swing to war production, city is now making a determined drive to get some business for its factories.

Of all the country's big towns, New York has been hardest hit by the swing from consumer goods to war production. With 7,500,000 inhabitants, the metropolis has 5.7% of the national population. But its current figure of 400,000 unemployed is 15.4% of the U. S. total. And, while New York City produced 7.6% of the nation's peacetime manufactures, it has only 3.7% of the total war contracts.

• **A Civic Yell**—These dolorous statistics form the theme in the civic yell for help now being directed toward Washington—a chorus led by the strident soprano of Mayor Fiorello (Flowerlet) H. La Guardia.

Why must New York suffer sly digs about becoming a ghost town while Pittsburgh roars and Detroit hums with activity?

It will surprise most folks to learn that New York is a city of small business men. The town has 35,421 factories, and 14,446 of these have less than five workers. The average is 19. Its biggest industry is clothing manufacture with 11,435 factories, but more than 3,000 of these employ fewer than five persons. Of the 3,630 shops producing metal goods, 1,781 work less than five employees.

• **Subcontracting Problem**—Cleveland and Philadelphia have small industries, too, but in many cases these have received subcontracts from big prime war contractors in the area. New York has almost no big heavy industries to feed out contracts to the little fellows. Such as there are (the Brooklyn Navy Yard, the Bethlehem shipyard on Staten Island) find that New York metal-working shops, many of them turning out light household equipment, can't meet the fine tolerances and precise machine work required by Army and Navy inspectors. And New York's clothing manufacturers have been unable to meet the prices of Southern competition in bidding for uniform contracts.

Now that the crisis has arrived, some persons charge that municipal and industrial officials were asleep at the switch when the war gravy train went past. Actually the small manufacturers have just begun to awake to the facts. Being poorly adapted to war precisions, they have continued to turn out consumer goods and to coast along on a strong consumer demand. They heard warnings that the war glutton would gobble their raw materials but when business is good you don't borrow trouble.

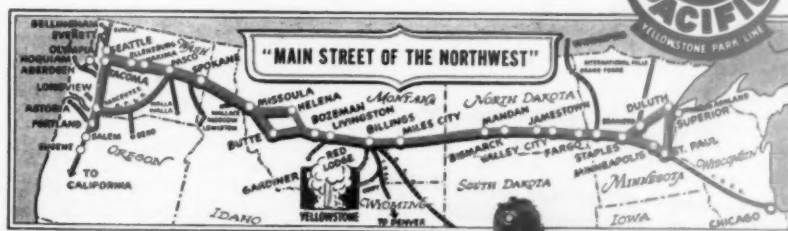


Count 20 and you've got a soldier

THIS KIND of sheep-counting should keep you awake!

The fleece of twenty, more or less, is what it takes to equip one soldier. Although we raise in this country much of the wool we normally need, a soldier or sailor requires 4 to 10 times as much new wool as a civilian. Remember that, if you soon have to do without clothing or blankets made of virgin wool.

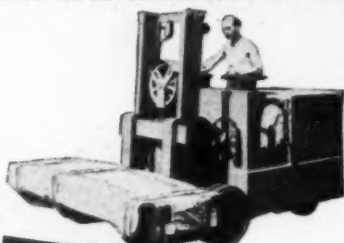
Because America is practically self-sufficient in new wool for our fighting forces, Northern Pacific may take some pride in the fact that it has always "talked sheep". From the grassy plains and mountain pastures along the "Main Street of the Northwest" comes over one-fifth of the nation's wool production—enough for half a million soldiers.



NORTHERN PACIFIC RAILWAY

Speed Production

WITH IMPROVED HANDLING METHODS



Cut Handling Time

You can move more goods faster, at lower cost with Mercury Material Handling Equipment. This Mercury truck unloads steel from box car, carries and stacks it in half the time 5 men could do the same job.



The Mercury "Trackless Train" keeps your loads on wheels, readily movable for short or long haul. The tractor can be disengaged for other work while the trailers are loaded or unloaded. No idle power or wasted time! The train can reach all corners of your plant and yards because it is not confined to a fixed path.



A Mercury Fork Truck can double your storage space without increasing your floor space, by stacking clear to the ceiling. This way you're storing at the height of profit... saving time and money.

Write for Free Booklet showing complete line of Mercury Material Handling Equipment.

Mercury

TRACTORS TRAILERS LIFT TRUCKS

MANUFACTURING COMPANY

4146 S. HALSTED STREET, CHICAGO, ILL.

• **On Their Necks**—Now the realities have come to roost, squarely on their necks. The original stocks are gone, iron-clad restrictions against new supplies go into effect during July and August. Unless something is done, quick, the unemployment figure of 400,000 is due for a sharp jump.

Materialization of the bad news has provoked new criticism of Mayor La Guardia—as having been too busy bouncing about the country on extra-curricular war activities to pay proper attention to his mayoralty duties. But hizzoner has had a man on this particular job. He is George A. Sloan, New York City's commissioner of commerce and chairman of the mayor's business advisory committee.

Mr. Sloan has realized all along that New York's is a small business problem. Hence he has promoted subcontracting clinics, made complete surveys of the city's housing and manufacturing facilities, has dinned the facts into the ears of Washington's production officials.

• **Skill and Machines**—One point that makes 'em all sit up is the disclosure that unemployment in consumer trades has made New York a reservoir of skilled workers and some needed machines. A survey by the War Production Board revealed that in May there was a weekly total of 122,000 idle hours on critical tools in New York shops.

While shipping losses have grown increasingly serious, some 6,000 men have been laid off in New York's ship repair yards in recent months. There are six large ones in the city. All of them have suffered from the diversion of business to other points because the U-boats have been operating on lanes leading to New York harbor. The same danger has caused the rerouting of much tonnage away from the port, thereby crippling the city's immense shipping industry.

• **Labor Conference**—Last week the N. Y. State Federation of Labor and the Central Trades and Labor Council conferred to see what might be done. Thomas Hill, a government labor consultant, told the meeting that the city's unemployment probably would reach a half million by Jan. 1. He classified the present jobless as: 55,000 in building construction, 70,000 in the needle trades, 80,000 in other manufacturing, 55,000 in service industries, 5,000 in transportation and communications, 135,000 in wholesale and retail trade, real estate, finance, insurance.

The pooling of small plants was suggested by Mr. Hill as a means of arresting the decline. Results in this line haven't been spectacular. A pool of upholstered furniture manufacturers, formed in the spring, is still waiting for contracts, having run afoul of legal difficulties in its organization papers.

• **Other Efforts**—A second pool spon-



New York's unemployment and its lack of business are the particular problems of George A. Sloan, commissioner of commerce of New York City and chairman of the Mayor's Business Advisory Committee.

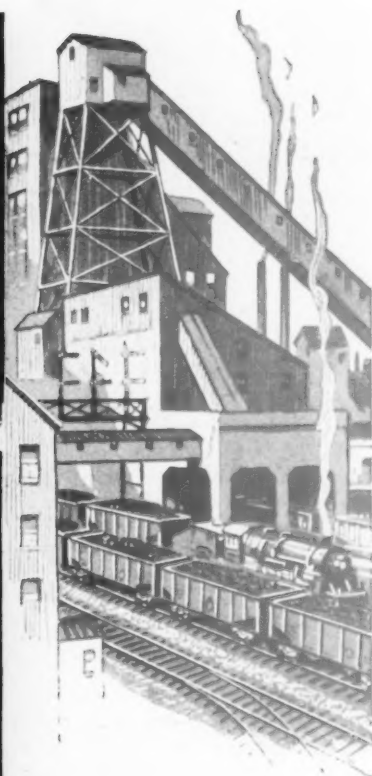
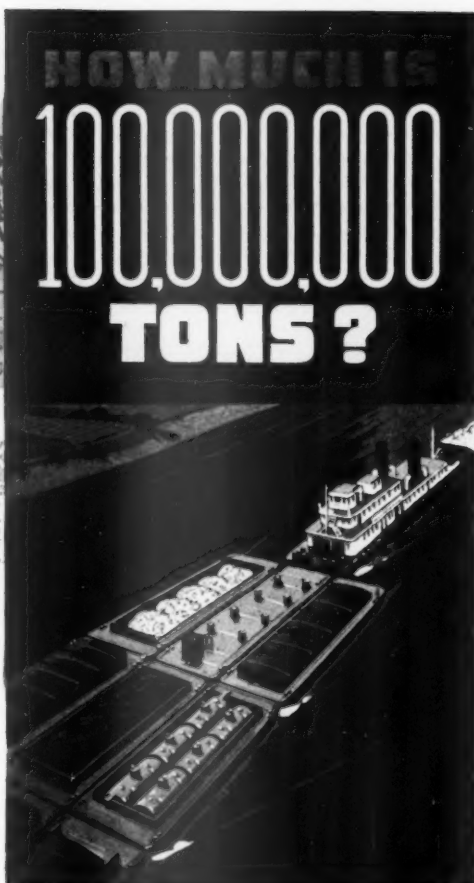
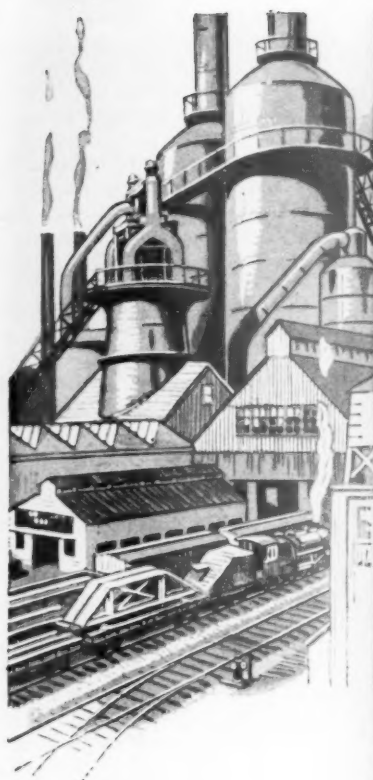
sored by the National Bedding and Upholstery Manufacturers Board of Trade has been approved but has received no orders.

Undaunted, 25 cabinet makers and woodworking concerns joined last week in a pool under the blessing of the Manufacturing Woodworkers Assn. of New York City.

The only full-sized war plum to fall to New York is a new aluminum plant. This project was allotted the city because of (a) a surplus of available power, and (b) a deliberate attempt to relieve unemployment. The construction already is under way but the plant won't be in production for a year. Estimates of jobs it will furnish run as high as 20,000. However, New Yorkers agree with military officials that their city isn't an ideal location for critical war plants because of the threat of bombings.

• **New Idea**—Mr. Sloan and his city department of commerce have proposed a new idea to solve the city's lack of durable goods manufacturers and war plants which could parcel out subcontracts to the "light industries." His idea is to enlist an outstanding engineering firm which would, in effect, act as a prime contractor, parceling out subcontracts to small plants, superintending all the stages of plant planning, manufacture, inspection and delivery.

Such an engineering-management firm would be retained either by the WPB or by WPB's new Smaller War Plants Corp. Legislation establishing this corporation provides authority for the Sloan suggestion. The type of firm mentioned



AHUNDRED million tons is 200,000,000,000 pounds. It is 2,000,000 carloads of fifty tons each. It is the approximate tonnage handled by the Barge Lines of the Mississippi River System in 1941. It is ten percent more than all of the steel produced in the United States in 1941. It amounts, in tonnage, to one sixth of all the coal mined in the United States in 1941. It is, in fact, a very sizable lot of freight. Expressed in terms of volume per day, it is 5,479 fifty-ton cars delivered to destination each day, three hundred and sixty-five days per year.

These figures indicate only the size of River Transportation as a modern adjunct to industry. They do not suggest the speed, the economy and the efficiency with which this large and widely assorted tonnage is handled. These are the principal factors which have influenced American shippers to use River Transportation in such volume under the stress of War Production. These are the factors that will make them continue to do so to an even greater extent when the pressure of War is removed and the only issue involved is one of dependable, efficient and economical transportation.

AMERICAN BARGE LINE CO., PITTSBURGH, PA.

CAMPBELL TRANSPORTATION CO., PITTSBURGH, PA.

UNION BARGE LINE CORPORATION, PITTSBURGH, PA.



New Naval Medical Center Uses



Refrigeration



The new Hospital of the Medical College of Va., at Richmond, uses Frick Refrigeration throughout.

This fine hospital, recently completed from designs by Paul Cret, is one of several hundred great institutions served by Frick Refrigeration.

At the Naval Medical Center, a combination of Freon-12 and ammonia cooling equipment is used. Six Frick low-pressure units cool drinking water, do air conditioning, and keep the mortuary boxes cold: three Frick ammonia compressors, each of 8" by 8" size, carry the load for ice-making and food service, including ten refrigerators and storage rooms.

Whatever your commercial or industrial cooling needs, in peace or war, you can depend on Frick Refrigeration to meet them with entire satisfaction.



Frick Equipment has Provided Dependable Cooling Service at the St. Vincent De Paul Hospital, St. Louis, for 12 Years.



A Frick Cold-brine System Cools 14 Boxes and Makes Ice at this Hospital in Springfield, Ohio.



is one like Ford, Bacon & Davis. This company is said to have approved the idea, but was unable to volunteer for the job because of pressure from other war work. Another firm of the proper size and reputation is reported to have agreed to take on the commission provided Washington O.K.'s it. Comment in Washington has been favorable. Adoption of the idea might become a model for another subcontracting drive.

• **How It Would Work**—Mr. Sloan explains it this way:

"The central organization must be equipped with authority and financial resources. Because of the number and variety of small plants to be employed at whatever they are capable of producing, it will not be possible for such a central organization to deal directly with them. Hence it will be necessary to establish subcenters—between the principal center and the producers themselves. Each subcenter should handle anywhere from 100 up of the small plants. This number can be increased as soon as requirements are ascertained and routines established.

"Under the proposed plan the compensation of the engineering-management firm will be a single management fee paid by the government. The central organization and the subcenters will not be compensated as to profit, though reimbursement will be made by the producers for all expenses, including salaries. Compensation to the producers will be included in the prices which may be agreed upon per unit and will be decided after sufficient trial runs to determine costs."

• **Engineering Aspect**—It is pointed out that competent engineering talent is necessary because the small New York metal plants lack the ability to adapt themselves to war products. Technical direction would be needed to bring the tools to uniform quality, to place them in balance, to space and locate them efficiently. The case of the needle trades differs since many of the plants are large enough to serve as prime contractors and even among the smaller plants there are well-organized specialty associations.

The needle trade industries have been the most vociferous protesters because they are the largest and most strongly organized. Women's wear manufacture is dominated by David Dubinsky's powerful A.F.L. International Ladies' Garment Workers Union, while the men's wear is ruled by Sidney Hillman's C.I.O. Amalgamated Clothing Workers.

• **Heard in Washington**—Representatives of these unions made themselves heard in the conference held in Washington on June 19 to study New York's troubles. More work on uniforms, parachutes, other textile items was demanded for the city. It has been charged that up to January the New York city area, with 40% of the coun-

try's clothing industry, got orders for only 100,000 army trousers out of contracts calling for 25,700,000.

The Amalgamated reported that most of this business went to "mushroom shops" in Georgia, Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Texas, Oklahoma.

• **Unions Concede**—Both the I.L.G.W. and the Amalgamated have agreed to modify their pay scales to bring down the costs of government contracts. In addition, the WPB has been asked by the city's department of commerce to allow New York manufacturers a price differential in bidding against low-cost producers in the South.

In the silk dress trade, union wages outside New York are about 25% lower, and nonunion wages are more than 50% lower than New York union standards. In the wash dress industry the handicap is smaller, being 16% and 24% respectively. There is some compensation in the greater efficiency of New York labor. Thus, slight concessions in pay rates or government differentials might enable the New York worker to meet the costs of his southern brother.

• **Vacant Apartments**—The mayor's committee on property improvement recently made a survey which showed 77,836 vacant apartments in the city. This fact is being sold hard in Washington as a reason for bringing more government offices as well as war orders to the metropolis.

There is plenty of office space to accommodate any transplanted white-collar battalions. In many areas New York rents are still slipping. Modern buildings in the Wall Street district offer rentals at \$1.50 to \$1.75 per sq. ft. Uptown things are somewhat better.

Self-Help Clinics

Retailers and wholesalers find that Department of Commerce community plan answers some wartime problems.

Many industrialists have found wartime salvation in programs of self-help such as the famed York Plan (BW-Sep. 6 '41, p. 17). Most wholesalers and retailers, however, have been taking their economic buffeting without benefit of similar organized safeguards.

• **An Idea Catches On**—By way of lending a helping hand to the distributive trades, the Department of Commerce recently cooked up an education program called "Local Wartime Business Clinics," with self-salvation as the basic theme. The idea caught on like wildfire. Scores of cities set up clinics, and requests for 17,000 copies of a manual of procedure poured in.

Startled by the response, the depart-



U. S. ROPE HEADACHE ... its cause and cure

As you can see by the map, we are still getting fiber for making rope and twine from East Africa, Mexico, Haiti, and Cuba.

But it's not enough! That's why Plymouth asks your help in providing essential rope, through conservation, to the Navy, Army

and War industries. For example:

1. If your own priority status necessitates the use of Plymouth Ship Brand Manila Rope, use it sparingly. Plymouth "Wartime" Rope (made of sisalana fiber) will serve satisfactorily for most uses.

2. But make *all* rope last longer. Rope users hold the means to add more than 15,000,000 pounds to the U. S. fiber stockpile this year, simply by making each piece of rope last 10% longer through proper care and handling.

HOW? By following the rules in the free Plymouth Booklet "Making Rope Last Longer."

You can help tighten the noose on the Axis by joining this rope-saving campaign. Distribute the free Plymouth Booklet to all workers who use rope.

And since tying twine is also made from rope fiber, a word about conservation to your shipping department is also a boost for Uncle Sam.

For free literature write to the Plymouth Cordage Company, makers of Plymouth Ship Brand Manila Rope and Plymouth "Wartime" Rope. North Plymouth, Massachusetts, and Welland, Ontario.

PLYMOUTH ROPE FOR INDUSTRY

BINDER TWINE ★ ★ ★ TYING TWINE



ment is mapping new promotion and is preparing to iron out some of the kinks through case studies. Dr. Howard T. Hovde, on leave from the Wharton School, is taking the clinics under his wing as special departmental consultant.

• **Clinic's Scope**—A wartime business clinic is intended to dissect just about anything affecting the local economy. Price regulations, rationing, labor shortages, and curtailment of services are standard topics, although such old favorites as priorities and allocations also get an occasional whirl. Because distributors currently require help and information more urgently than anyone else, the topics are naturally slanted their way, but not to the exclusion of manufacturers and professional men who may wish to participate.

Clinic membership on the average divides up thus: 32% retailers; 10% wholesalers; 8% each for manufacturers and contractors; 5% bankers; 4% each for canners and lawyers; 2% trade association executives; 27% miscellaneous.

• **Getting Started**—Usually the local chamber of commerce, newspaper, or some civic organization gets the ball rolling, with the Department of Commerce supplying expert advice. The first step is establishment of a steering committee, composed of business leaders and not infrequently local educators. Then a panel of experts, including government officials if possible, is appointed. Its job is to answer all queries. In the ideal setup, such queries are sent in advance so that the experts have time enough to mull over fruitful answers.

At the meetings, the queries are publicly hashed over, but no speeches or lectures are given. If the questions cover more than one topic, the Department of Commerce recommends that more than one meeting be held to keep the wires from getting tangled up.

• **Philadelphia Program**—Perhaps the flossiest of all clinics, and the one the department hopes to use as its main case history, is now in the making in Philadelphia. Three months of preparation are going into it, and its ramifications include:

(1) Three test clinics at which small groups of merchants learned about the General Maximum Price Regulation and similar orders while acting as guinea pigs.

(2) A special course at Teachers College, Temple University, on "Contents and Methods of Conducting Wartime Clinics." This 15-session course is designed to supply the field with academically trained disciples.

(3) A "Grand Meeting" on Sept. 15 to surround the program with showmanship. This blowoff has a roster of high government officials, is being worked out by 55 trade associations.

(4) Nine regional clinics (the real backbone of the whole affair) each of

which is subdivided into trade groups. Topics for discussion include: How consumers can conform to more efficient buying practices; cutting store hours; pooling inventories; cutting waste out of delivery systems; practical credit practices; combining businesses to avoid liquidation; better operating methods.

• **What's in It?**—Unlike the York Plan—which showed a tangible dollars and cents return to its proponents—the clinic idea as yet can't be gauged by book-keeping methods. Its biggest value, apparently, will be in that it will acquaint distributors with new government regulations, and show them how to effect economies.

By way of sidelight, it's no secret that Thurman Arnold has heard of the clinics as quickly as anyone, keeps an eye on them. It's generally agreed, however, that business men as a whole will be careful enough not to turn self-help into restraint-of-trade.

Reform on Forms

Nelson's drive to simplify paperwork imposed on industry is an effort to improve on some controls that already exist.

If, after Oct. 1, a business man receives a War Production Board questionnaire which does not bear a certain symbol, he can chuck it into the wastebasket. He will know that it was not approved by the new Committee for the Review of Data Requests (BW—Jul. 11'42, p7).

• **No Bones About It**—WPB (and the Office of Price Administration as well) make no bones about the fact that they have been heaping a terrific amount of

clerical work on industry. And, industry, prone to regard much of it as sheer nuisance, naturally breathed an "Amen" when Donald Nelson assigned Joseph I. Lubin to the job of cutting red tape.

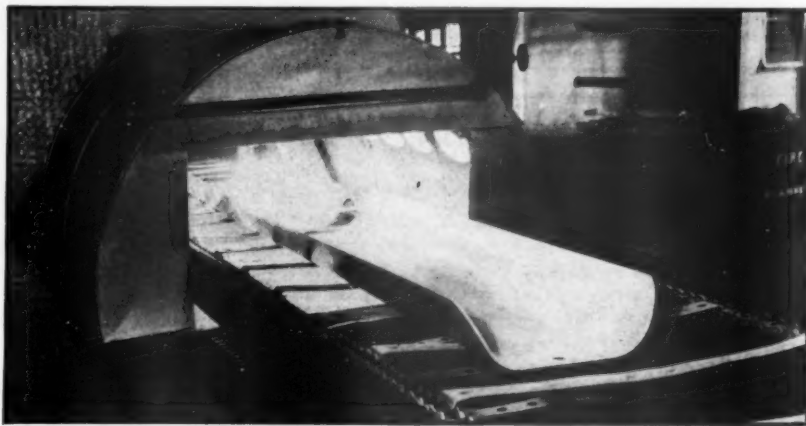
Contrary to popular impression, however, no paper is now sent out until certain rigid controls have eliminated the overlap, screwball questions, and cloudy verbiage.

• **How It's Done**—At WPB the control system is known as the Office of Survey Standards, and is headed by Howard Grieves. OPA simply calls its version the Questionnaire Branch (in charge of Charles B. Lawrence, Jr.). Each in its field passes on application forms, production certificates, rationing data, and whatever special mail surveys are necessary. Here's how the control system functions:

Suppose a branch chief at WPB wants to know something special about the structure of the toothbrush industry. With his assistants (including a researcher) he finds out roughly what angles stump him, then sends the query to the Office of Survey Standards.

• **Yardsticks**—Here the suggested questionnaire is checked in the light of the following: Is the data available from existing statistics in the files of any government agency? Does the questionnaire overlap with any other WPB questionnaires or forms? Can it be changed a little so that it will eliminate possible future surveys in, say, the field of plastics or bristles? Would toothbrush manufacturers have enough data on hand to be able to answer intelligently?

If the request passes muster (many don't) it is sent to the Division of Statistical Standards, a branch of the Budget Bureau. Here it gets another checking to prevent it from overlapping with any other surveys in any other branch of the government. If it passes



NONMETALLIC REFLECTORS

New composition reflectors for fluorescent lighting ride a conveyor through the infra-red ovens of Hygrade Sylvania Corp. for a final bake

on their synthetic enamel reflecting surfaces. They look and operate like their all-metal predecessors, but are considerably lighter, easier to erect—and do not run afoul of priorities regulation.



"DRY-ICE" GUN

First order for the new Monner dry-ice gun has just been placed by the Colorado Home Guard which wants 100 of them for target practice. According to the inventor, Ray J. Mon-

ner of Denver, the .22-cal. rifle shoots inexpensive lead slugs with the gas from solid carbon dioxide in crushed form instead of powder, its magazine holding "sufficient ammunition . . . to shoot 2,000 times." Since the gas evaporates cleanly, there is no fouling.

this second test, it's ready to be sent out once the Office of Survey Standards has polished the technical format.

• **Lubin's Assignment**—Despite this determined system of checks and double-checks, the new WPB data-review committee which Mr. Lubin heads (OPA as yet hasn't a counterpart) thinks it can cut paper work still more. For one thing, as the war program changes, it leaves in its wake an accretion of old forms and questionnaires which can be lopped entirely. For another thing, it may be possible to telescope several forms into a streamlined singleton. And finally, all "bootleg" requests will be eliminated. On the data review committee, the War Department, Navy Department, and the Bureau of the Budget, as well as WPB, will be represented. Mr. Lubin expects to have a special advisory committee of industry representatives.

"Bootlegging" is the unofficial nickname for issuing surveys (usually small ones) for the personal guidance of an official. These often go out as private mail, fail to be cleared by the Office of Survey Standards. Nelson now wants this type of fishing expedition stopped. • **Hopes for the Future**—WPB figures that when its committee is finished with the streamlining process, there'll be fewer occasions for internal and external squawks. And the Budget Bureau eventually hopes to make a similar housecleaning on the papers used by all other war agencies.

One situation which the WPB can't case, however, is a manufacturer's sloppy treatment of the forms sent to him. Much paper work is made more tedious than need be because manufacturers

sometimes still scatter forms and applications throughout the shop, thereby taking up a lot of people's time (usually to poor avail). Not infrequently a manufacturer will have a sliderule artist calculate his inventory to four decimal places

when the questionnaire merely has asked for an "estimate."

• **Scope of the Quizzing**—An estimated 7,000-8,000 different types of questionnaire are annually issued by the combined government agencies. OPA thus far has made 1,500 different studies (but some were gleaned from existing data, didn't require a questionnaire). WPB thus far has issued 650 separate forms of which 399 referred to priorities.

Merck's Quinine

Cinchona plantations which company started in Latin America in defiance of Dutch monopoly show good production prospects.

Trust-buster Thurman Arnold's drive against holders of German patents in the U. S. and general concern over the health of American fighting men have combined to hold the spotlight on the quinine situation. Japanese conquest of the Dutch East Indies has cut off regular channels of quinine supply. And control of domestic manufacture of atabrine (a quinine substitute) by Winthrop Chemical Co. through license from I. G. Farbenindustrie, the German dye trust, has raised questions as to the sufficiency of the optional drug.

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• **Licensing Arrangement** — However, things look better now in the drive against malarial chills and fever. Announcement has been made that Winthrop has licensed a rival, Merck & Co., to make atabrine while Winthrop is expanding its own production. Merck entered this field at the request of the U. S. Public Health Service.

Under the new arrangement Winthrop retains its control of the patents but permits Merck to manufacture the synthetic, which is a coal tar derivative. Merck obtains no other right on atabrine, will turn over all its production to Winthrop for sale and distribution.

• **Quinine Program**—Meantime Merck is very busy on the quinine front. The company states that while atabrine "has a certain value for treatment of malaria" after the disease occurs, it does not serve as a complete substitute for quinine, which is both a remedy and preventative. So Merck is speeding a program for South American quinine. Production prospects, added to the (undisclosed) stocks in the country, are thought to be sufficient for national requirements.

In describing steps to revive quinine growing in Latin America, Merck explains why war caught the U. S. short on quinine stocks. The plain answer is that the Dutch quinine monopoly would not allow sufficient supplies to be shipped here.

• **A Transplanted Industry** — Quinine comes from cinchona, the bark of a South American tree. Like rubber, the industry was transferred to the East Indies. The Dutch government started the planting of the trees in Java about 1850. From this start, it shrewdly nurtured its global quinine monopoly. By careful selection and breeding a type of bark was created so high in quinine content that it killed off competition of the low-content wild South American trees.

It takes a cinchona tree 12 years to produce and when the bark is harvested the tree dies. Hence the reluctance of other nations to buck the established combine.

• **Monopoly's Methods**—Merck details the methods by which the Dutch monopoly prevented U. S. quinine manufacturers in this country from accumulating adequate inventories during 1939 and 1940. American manufacturers had to stay in line or bark would be withheld. A Merck statement says:

"In the U. S. the Dutch monopoly set up their own agent to sell their own quinine, namely, R. W. Greeff & Co., of New York. These agents would sell at a discount which the Netherlands monopoly would not let the American manufacturers of quinine equal. Dutch manufacturers were gradually forcing American manufacturers of quinine from the market."

• **Merck's Plantations**—In 1927 the Dutch monopoly tried to enforce an American contract that would have

made kindling wood out of the Antitrust laws. The Department of Justice filed antitrust suits but got nowhere because the defendants were all abroad. As a result of this trouble, Merck decided to establish its own cinchona plantations in Latin America.

Victor E. Ruehl of Merck & Co. began searching South American jungles for high-production cinchona seeds in 1930. These and plantings obtained in Java were turned over to the U. S. Department of Agriculture which enthusiastically aided the work. Plantations were bought in Guatemala and cultivation began in 1934. Ruehl also discovered large abandoned cinchona plantings which had been started in 1870. Steps were taken to return them to production.

• **Pressure Applied** — Meanwhile the Dutch monopoly was demanding that the project be abandoned under threat of withholding cinchona bark from the company. Merck persisted. This may have been the reason why the monopoly ignored requests to increase supplies of cinchona to this country during the 1930's. These demands were urgently backed by U. S. State Department and other government agencies in 1939.

The Dutch refused to ship more quinine or to become excited by the outlook. On May 8, 1940, just before Hitler swept into Holland, a cable from Amsterdam advised Merck to be patient and added that the "general situation is not considered so complicated here and is less influenced by sensational reports." On the day of the actual invasion monopoly officials were in the country for the week-end and couldn't be reached.

Merck now reports that its Guatemala plantations are progressing. There are over 1,500,000 plants in various stages of growth, but these are still a long way from volume production.

Drug Casualties

Restrictions on use of botanicals—for example, agar and quinine—deal hard blow to many proprietary products

During the last war, the U. S. drug industry was forced to replace Germany as its major source of synthetic medicinal chemicals, particularly the coal tar derivatives.

Today's counterpart of this problem is the drug industry's necessity of replacing normal European, Mediterranean, North African, and Asiatic sources of botanical drug supplies.

• **Work to Be Done**—To date, the industry's two-fold approach to the problem—development of domestic or Latin American sources and substitution of



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synthetics—has brought surprising results, but not complete success.

Botanicals probably are the oldest form of medication. Many have been handed down through the centuries as part of superstitions, religions, or therapeutic practices.

• **Sifted by Science**—The development of modern medical science cast aside many botanicals which had previously been used on an empirical basis. Enactment of the Food, Drug, and Cosmetic Act in 1938 forced others into a secondary place in the proprietary drug field. However, both of these developments also served to strengthen the position of other botanicals by placing their use on a scientific, rather than traditional, background.

For example, many doctors are convinced that nothing has been found to replace the use of digitalis in heart conditions, while there are some who believe that no synthetic has yet been developed to completely replace quinine made from cinchona bark as an antimalarial—not even atabrine (page 45).

• **WPB Orders**—To conserve current supplies, the War Production Board has issued a series of orders prohibiting the use of quinine, cinchona bark, or any of the so-called minor cinchona alkaloids in any drug or preparation that is not specifically designed for use as an antimalarial. This stopped the use of quinine in a number of proprietary cold and pain killing preparations as well as a limited use in hair tonics and a few other products.

What the proprietary industry will use in place of quinine in preparations which are not exclusively used as antimalarials has not yet been disclosed. Atabrine and the other synthetic antimalarials are not generally regarded by enforcement officials as suitable for use in these or any other self-medication preparations. In fact, WPB's order is expected to result in a number of drug product war casualties—particularly those not used as antimalarials whose names contain the word quinine or variations thereof.

• **Agar Use Limited**—A similar problem has been raised by another WPB order banning the use of agar, which came from Japan, for any purpose except in bacteriological work.

A number of prominent proprietary laxatives included this ingredient, and the names of some of these products include variations of the word agar. Neither the Food and Drug Administration, nor the Federal Trade Commission indicated any regret over the WPB order because they have both felt for some time that the amounts of agar used in these products contributed little, if anything, to their laxative properties. Of course, such names cannot be used when the product does not include the banned ingredients.

• **Opium Stockpile**—As a result of gov-

ernment-industry cooperation, the U.S. has a sizable stockpile of opium, and supplies are continuing to come in from certain Mediterranean sources by a round-about way. If this source of supply is shut off, U.S. Narcotics Commissioner Anslinger believes that the U.S. can produce narcotics from a botanical material closer home.

In the meantime, faced with the necessity of supplying United Nations and Latin American needs as well as those at home, both industry and the government are making progress with synthetic substitutes, while the latter is also working on ways to reduce dosages.

• **Home-Grown Botanicals**—The industry also has been heartened by attempts to grow some of the other major botanicals in the United States, where labor costs and cultivation problems make this an unprofitable business in normal times.

Digitalis is being grown in New England, ergot, belladonna, and henbane in the Middle West, and efforts to cultivate others are being made in all parts of the country. In the case of some of the botanicals, the active principles have been discovered, but no one has yet successfully translated these active principles into synthetics.

• **Synthetics**—A synthetic has been developed for ephedrine, which normally came from China, and several synthetics are available to replace the menthol normally imported from Japan. However, synthetic menthol has not yet been accorded recognition in the official book of drug standards, the United States Pharmacopoeia, and large menthol users have placed educational orders to see what can be done with the types of peppermint oil which come from the mint grown by American farmers.

FOR MERCURY POISONING

A method of controlling mercury poisoning, plague of those who have mined the silvery liquid metal since it first became known to man thousands of years ago, has been devised by the University of California chemist.

Miners can be protected, reports Dr. Merle Randall, professor of chemistry, by spraying the walls of mercury mines with a chemical solution he has devised which contains calcium polysulphide and which provides a coating through which the mercury cannot vaporize. The method has been tested over a period of eleven months, and during this time not a single case of salivation or mercury poisoning has been reported where it has been used.

Professor Randall developed his process as the result of the opening of an abandoned California mine, the Contact in Sonoma County, and success of the technique will make possible the reopening of many others.

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Inter-Latin Trade

With old markets cut off by war, hemisphere republics turn to each other, thus giving impetus to own industrialization.

When the price of eggs soared to \$1 a dozen in Panama early this year because of the influx of United States troops to guard the Canal and the rush of native farm labor to higher-paid construction jobs, Panama officials decided something had to be done. And since the shipping shortage makes additional deliveries from such big-scale suppliers as the United States or the Argentine impossible, Panama sent scouting missions along the coasts of Costa Rica, Nicaragua, and Salvador. As a result, farmers in these small countries have a new outlet not only for eggs but for fresh vegetables.

• **A Developing Trend**—This is typical of a trend that is rapidly developing all over Latin America. Cut off by the blockade from normal markets and suppliers in Europe, and faced with a drastic curtailment of shipping space on boats plying between North and South America, Latin American countries are beginning to trade with each other on a rapidly expanding scale.

Brazil's exports to other countries in Latin America last year increased 83% over the same period in 1940. Argentina boosted its sales to neighbors 29% in the same period, and Mexico practically matched Brazil's record with an export gain of 81% in trade with the countries south of its border.

• **Some Examples**—All kinds of products are moving in the new trade channels. Argentina boosted its purchases of fine Brazilian textiles from \$1,384,506 in 1939 to \$5,161,863 in 1940, and a few weeks ago removed all restrictions on the importation of Brazilian textile for the remainder of 1942. And, when a shortage of British coal imports developed in 1941 which threatened to curtail rail service, Buenos Aires officials quickly negotiated for 42,000 tons from southern Brazil.

Buenos Aires is losing no opportunity to use the present emergency to build new export markets. A few weeks ago one of the oldest and biggest textile manufacturers in the Argentine announced that he would open a display room in New York to show fine woolen materials like those that he has exported for years to luxury stores in Paris, Madrid, Lisbon, Rome, and Brussels.

• **Argentine Shoes**—The Footwear Manufacturers Assn. of Argentina recently held its first display of Argentine shoes designed especially for the export trade. Buyers from half a dozen neighboring countries as well as from Spain and Por-

tugal attended. To protect a growing foreign trade in this line, the Argentine government recently decreed that every pair of shoes intended for export be clearly marked to indicate the grade of leather and the method of manufacture in order to protect the foreign purchaser.

The big countries among the 20 Latin American nations are not the only ones to grab the initiative in finding new outlets for their surplus products or in building new industries.

• **Sandals, Lard, and Rice**—Guatemala is setting up a small shoe industry, the specialty of which will be a native style of sandal utilizing canvas from Salvador and rubber from Guatemala. Honduras is selling increasing quantities of lard to Mexico because Mexico pays higher prices than Honduran markets. Ecuador has found a ready market for its surplus rice in Chile, Peru, and Bolivia.

Salvador has just closed a contract with Chile for 100,000 henequen sacks to replace supplies normally purchased in the Orient. And several enterprising Caracas merchants recently chartered two small ships, normally used in the coastwise trade of Venezuela, to carry a cargo of coffee to Argentina, and bring home a load of building materials.

• **Concessions Are Exchanged**—In many cases this trade is being placed on something more than a temporary basis. In October, 1941, Venezuela and Chile, for the first time in their history, came to an agreement to exchange trade concessions. Brazil has reduced duties on Chilean fruits, wine, sulphur, nitrate, and chemicals in exchange for Chilean import duty cuts on coffee, cocoa, raw cotton, and carnauba wax. Mexico and Chile have just concluded a new trade deal, the terms of which are not yet revealed.

Transportation links, now being pushed as fast as the supply of materials will allow, will make it easier to increase inter-American trade.

• **Rail Equipment Wanted**—Mexico is struggling to get enough rolling stock to exploit its all-rail, standard gauge rail route from the United States to the border of Guatemala (BW—Jul. 11'42, p40). Peru has just completed a motor road across the Andes to the fertile upper stretches of the Amazon valley which grow quantities of the tropical raw materials that the United Nations now need desperately.

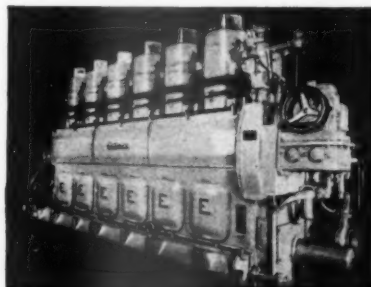
Bolivia and Argentina have just negotiated an agreement to build a pipeline from Bolivia's oil fields on the eastern slopes of the Andes to Argentina's refineries, and the government-owned oil company in Argentina has agreed to purchase all of the petroleum produced in this field in the next 10 years. Paraguay and Brazil are already linking their commercial centers with a rail line (BW—Jan. 25'41, p54), and Brazil has recently promised to build a free port at Santos for Paraguayan merchandise.

IN THE NEWS

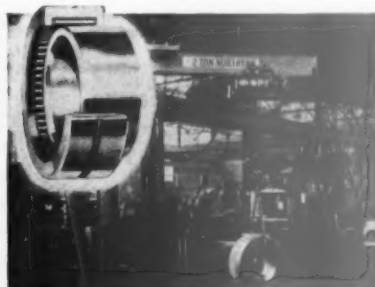
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HUNDREDS OF ANTI-FRICTION BEARINGS—from tiny, jewel-like parts for delicate instruments to bearings of huge dimensions which support revolving gun turrets weighing many tons—are needed to complete a modern ship of our growing battle fleet. Speeding production of the country's wartime shipping program is Bantam's delivery of many of these bearings months ahead of schedule. For Bantam is tooled-up to meet the new and unusual in bearing design. Whether you need a special bearing or one of many standard types to meet an essential need, **TURN TO BANTAM.**



GIANT DIESELS supply the motive power for our growing wartime merchant marine—and constant, reliable service is a must. In the tappet roller assemblies of these power giants, built by Enterprise Engine & Foundry Co., hundreds of precision Bantam needle rollers serve to reduce friction and wear—another example of Bantam's service in supplying bearings for specialized applications.



SPEEDY HANDLING OF 15-TON LOADS is all in the day's work for electric hoist cranes built by Northern Engineering Works. And Bantam Quill Bearings used on the bridge truck wheels aid in reducing power cost, give increased speed of operation. The small size, high capacity, and efficient lubrication of the Quill Bearings also aid design, efficiency, and long service life.

PROMPT DELIVERY OF SPECIAL BEARINGS is part of Bantam's contribution to America's war effort. Equipped to handle new and unusual requirements without delay, Bantam can often make delivery of special bearings in less time than standard units can be obtained under today's conditions. Bantam also makes many standard sizes of anti-friction bearings in straight roller, tapered roller, needle, and ball. For fast deliveries and skilled counsel on the selection of your bearings, **TURN TO BANTAM.**

BANTAM BEARINGS

STRAIGHT ROLLER • TAPERED ROLLER • NEEDLE • BALL

BANTAM BEARINGS CORPORATION • SOUTH BEND • INDIANA

Guns

When war broke out Canada had no heavy gun factories, no machines, and no trained personnel. Heavy guns of ten different types are now in mass production. Today the Dominion has one of the largest factories in the world manufacturing artillery from scrap to the complete gun. One of the largest automatic gun plants in existence is located in Canada.

The 1942 production schedule calls for—

Anti-aircraft guns	over 400 per mo.
Field guns	" 500 " "
Naval guns	" 150 " "
Extra barrels	" 1000 " "

Tank and anti-tank guns are also in substantial production.

The Royal Bank of Canada

Head Office—Montreal

This advertisement is published in the belief that our American Neighbours will be interested in the facts presented. More detailed information is available on request to The Director of Public Information, Ottawa, Canada.

HALLOWELL
SHOP EQUIPMENT
WORK BENCHES • TABLES •
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Don't build your benches. Save TIME
and MONEY! Choose from 1367
"HALLOWELL" Combinations.



You are sure to find just the "HALLOWELL" you need — made up, ready to install. No detailed drawings — no figuring and specifying of multifarious sizes of lumber; no carpentry.

All "HALLOWELL" Benches are welded throughout, solid as a rock; can be moved around or rearranged and will always set rigidly without costly bolting to the floor. All have smooth, splinterproof tops — of steel, Masonite or laminated oil-and-water proof wood—which uses less vital material.

Operators everywhere prefer "HALLOWELL" Shop Equipment. It is sturdy and adds greatly to shop efficiency. Write for Catalog — today.

STANDARD PRESSED STEEL CO.
BOX 598, JENKINTOWN, PENNA.

• **Industrialization**—The need for closer trade ties in Latin America will be intensified at least during the next two years while the great manufacturing nations are engaged in war. This is bound to speed programs of industrialization.

The war itself is responsible for the United States' helping Brazil to build a steel industry (BW—Oct. 5 '40, p. 63), the recently-announced plan to build Fairchild training planes in Brazil, and the rumor that the United States will also aid in the building of a large ordnance plant near Rio de Janeiro.

• **Iron Mine**—Bethlehem Steel Corp. is being allowed to continue construction on its Venezuelan iron mine project, started more than a year ago. A 30-mile highway from the Orinoco River to the iron ore field is already completed, and a railroad is being pushed.

Mexico has a government-sponsored industrialization program which has already granted tax exemptions to industries whose total capital amounts to almost \$3,000,000.

Bolivia, since the outbreak of the war, has assisted in the building or enlargement of a lumber mill, a cotton mill, factories for the manufacture of underwear, shoes, hosiery and chemicals.

• **Cement, Too**—Because they can no longer import cement from the United States, Colombia, Peru, and Brazil are expanding their capacities for producing cement.

Argentina and Brazil signed an agreement on Nov. 21, 1941, providing that products of new industries developed in either country will be mutually exempted from import duties for 10 years.

Despite this progress in developing

inter-American trade, most Latin American countries still depend on their neighbors for only a small share of their foreign trade. Total exports of Latin American countries to other Latin American countries in 1938—last full year before the war—amounted to only 6.1% of their total exports. By 1940 this had risen only to 6.7% though the 1941 results (when they become available) will show some increase.

• **Import Figures**—On the import side, Latin America has made a better record. Imports of Latin American countries from other Latin American countries amounted to 9.4% of total imports in 1938, but increased to 12.3% in 1940, and will show considerable increases in both 1941 and 1942.

Argentina, for instance, has upped its imports from Brazil so far this year to nearly 15% of the total, from a bare 9% during the same period last year, and Venezuela is supplying more than 4% of Argentina's imports now, compared with less than 1% last year.

• **Legacy of the Past**—For centuries Latin America was literally forbidden to trade with itself. Each Spanish and Portuguese colony was held in economic serfdom, forced to produce only raw products, and forced to buy all its imports from Europe.

The last war changed things temporarily, and the depression of the 1930's gave Latin America automatic tariff protection in the form of currency depreciation. Profiting from the experience gained in these two periods, Latin America today is trying to increase its self-sufficiency to the point where it cannot be forced back into the old rut.



Six of fifteen American and British war heroes, on tour of 21 cities, meet

the men who make the Boeing Flying Fortress at the plant in Seattle.

Mazie is cussin' again!

Three long distance calls . . . seventeen different offices to ring to find the right man . . . inter-office calls tying up the board—that's why Mazie's in a state, and why important business is at a standstill.

Ask your switchboard operator how much time and motion this same sort of thing is costing in your organization. And ask yourself how much time you and your key men would save with 3-second Teletalk service available 24 hours a day.

Conferences, too, are held the Teletalk way without anyone leaving his desk. You "get together" with one person or a dozen by flipping the keys of their stations. You can hold an important incoming call while you get the information you need on your Teletalk. In short, you save *time* and lots of it, for yourself and for others.

Get the facts about Teletalk from the dealer in your vicinity. He will gladly recommend the system that meets your requirements. Capacities from 5 to 24 stations.

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Business Week • July 18, 1942

THE WAR—AND BUSINESS ABROAD

What the Russian Battle Means

For the Soviet, continued Nazi drive will not only spell loss of irreplaceable oil but direct threat to trans-Ural industrial bulwark; for United Nations, a longer, harder war.

Axis reconnaissance planes appeared twice this week over Haifa, Britain's most important naval base in the eastern Mediterranean after Alexandria. And planes of the United Nations continued to harass Axis supply lines in Libya.

But the real battles were being fought in Russia, with the Germans successfully driving ahead not only in the south, where they threaten to cut off the Caucasus, but also in the north, where a new drive again threatens Moscow.

Victims of Overconfidence

It is plain now that the democracies have once more been the victims of overconfidence and, despite the fact that every well-informed observer warned that the four summer months were bound to bring bad news, the general public is just beginning to realize how seriously the losses of the last few weeks and those just ahead are likely to increase the difficulties whenever the United Nations attempt to establish a second front.

Unless the Russians are able to stem the German drive very soon, Hitler may soon be in a position where his resources will compare favorably with those of his opponents (BW—Mar. 14 '42, p. 34), and where he has the advantage of short inside supply lines.

Hitler's Alternatives

Strategists have realized since the summer of 1940 that Hitler had (1) to knock out his opponents before they could catch up with his production, or (2) to capture enough raw materials and manpower to make it possible to fight a long war as effectively as his enemies.

The first scheme failed when London refused to capitulate in the summer of 1940. Whether he can successfully fall back on the second depends on the outcome of the battles in Russia and Egypt.

In spite of Russia's stubborn resistance to the Nazis, the Soviets have suffered serious losses. Though the Germans have been unable to use them, Moscow's loss of the war factories in the Ukraine seriously affected Russia's industrial potential.

The loss of the food supplies of the vast Dnieper valley, created grave

problems for Soviet officials, though they courageously minimized them.

Russia's Oil Resources

But if Hitler is able now to seize and hold the oil fields of the Caucasus (see map), it will change the entire course of the war for, despite rumors of vast new oil fields in the Urals, it is a fact that 80% of Russia's current production still comes from the great fields around Baku and Grozny.

Whether or not a vigorous scorched earth policy makes it impossible for Germany to get oil from the wells for several months is less important than the fact that Russia will be deprived of the oil. Without it, the Russian armies will soon be helpless. And without it, Soviet agriculture will come to a standstill because one of the goals most nearly achieved by the Stalin regime is the mechanization of agriculture.

This is not the only Soviet weakness which will be exposed if Nazi forces succeed in pushing eastward to the Volga. It is true that the Bolsheviks during the last 15 years have developed a great new industrial zone in the Urals and further east in Siberia. But should the present Nazi drive—which has already pushed the Russians back nearly 200 miles in two weeks—continue, even

with pauses, during the summer, it will bring the Nazi front lines to the Volga; even the Urals will be within easy range of Nazi bombers.

In Path of the Drive

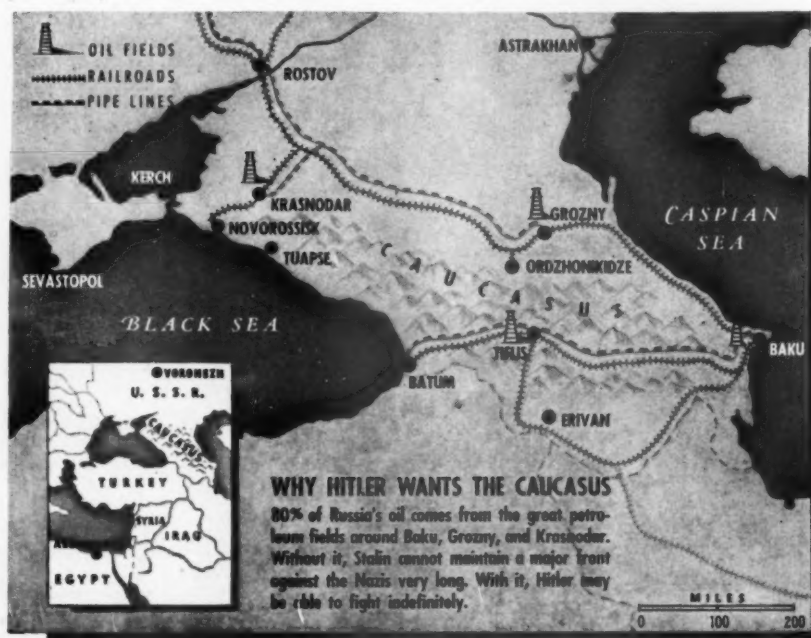
Ufa, center of the great new oil region, is less than 300 miles from Kuibyshev, and Orenburg—food processing center for the Ural industrial zone—is slightly closer. Even the great steel and machinery cities at Chelyabinsk and Sverdlovsk are barely 500 miles from Kuibyshev (BW—July 19 '41, p. 62). And Stalingrad, metallurgical and machinery center with a population of half a million, was less than 200 miles from the German vanguard this week.

Though Stalin is already heavily dependent on war supplies from the Urals area, the defense of the region has been mainly its remoteness from any potential enemy. With German troops now east of the Don River, the natural defenses of the Urals are beginning to look far less formidable.

Ranges Aren't Insuperable

These mountain ranges which have long marked the boundary between Europe and Asia are only 30 to 90 miles wide and few peaks tower above 2,000 ft. Nazi troops have already conquered or bypassed more rugged barriers in the Balkans. And yet, they—and the Volga River—are the last natural obstacles between the Germans and Ural industrial zone which today produces nearly half of Russia's iron ore, almost all of the copper, most of the chrome and aluminum, and the bulk of Russia's remaining heavy industries.

This is the background against which the present Nazi drive across the Ukraine must be appraised. The situation is alarming—for the United Nations, as well as for Russia.



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TRUCKS
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*Make hundreds of thousands of America's trucks haul twice . .
even three times . . as much, by pulling their loads on Trailers!*

For example—a truck which can ordinarily carry up to 4 tons of payload, can easily haul 8 to 10 tons on a Trailer.

Converting your truck to double its work-capacity is good business at any time. Right now, it's actually a national necessity. That extra hauling capacity will be needed desperately before long. Key officials say that within a short time, all rail-

way and highway equipment will be working at capacity, while war production will not yet have shifted fully into high gear.

The conversion of your truck to a tractor for Truck-Trailer hauling is simple and inexpensive. Any Fruehauf branch will give you detailed information. Any Fruehauf service station will do the job, if you wish.

**CONSIDER THESE VITAL ADVANTAGES OF CONVERSION
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It utilizes trucks already built. This is important, because manufacturing facilities must be devoted to direct war work.

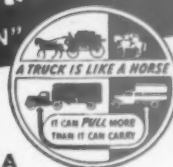
It moves more tonnage while conserving rubber and steel. A Truck-and-Trailer combination uses about 16% less weight of tires and 25% less steel and other essential metals than do the two trucks required to carry the same payload.

It conserves gasoline. A small truck, with a Trailer, uses far less fuel than the heavy-duty truck or the several small trucks needed to haul the same payload.

World's Largest Builders of Truck-Trailers
FRUEHAUF TRAILER CO., DETROIT
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FRUEHAUF TRAILERS
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TRUCK-TRAILER TRANSPORT IS DOING AN ESSENTIAL JOB FOR ALL AMERICA



BRAZIL-U.S. DEAL

The stabilization agreement between the United States and Brazil by which the United States buys surplus Brazilian commodities which formerly went into world markets and advances loans to offset the remainder of the loss of revenue due to the curtailment

of shipments to Europe, was extended in Washington last week. Signatories (left to right) were: Dr. F. D. Santos, Bank of Brazil; Henry Morgenthau, Jr.; Minister Fernando Lobo, Brazilian charge d'affaires; Henry D. White, director of monetary research, U. S. Treasury; and Enrico Penteado, Brazilian financial attache.

Nailing Ceilings

Canada cuts off escape of manufacturers to higher-priced lines. U.S. checks up on controls over strategic materials.

OTTAWA—When price ceilings press down on profits, manufacturers not unnaturally look for an out. One obvious out is to concentrate production on the higher-priced lines, where the margin of profit is greater (BW—Jun. 27 '42, p17). Canadian business men did not overlook this avenue of escape, but they might just as well have ignored it, for Price Ceiling Chief Donald Gordon has hung up a big "No Exit" sign.

• **Must Continue Lines**—For the express purpose of preventing a general increase in the cost of living through a shift to higher-priced lines, Gordon has ordered manufacturers and distributors to continue production and sale of staple goods in qualities and price ranges similar to those available to the public before the ceilings were imposed. They must not discontinue or curtail low-priced lines except when forced to do so

by the scarcity of materials.

Another price-control dodge of recent months has been substitution of new or modified lines for which there was no base-period price. Gordon's new order prohibits the marketing of such lines until official maximum prices have been set.

• **Living-Cost Index**—A rise of 0.6 of a point in the Canadian cost-of-living index for June placed the index for the first time at more than a full point above the pre-price ceiling level, and the July index will show a further advance. The June rise is attributed mainly to a sharp upping of the ceilings on beef.

Authorities look, however, for a decline in meat and vegetable prices in the late summer which will lower the index and avoid the necessity for a readjustment of workers' cost-of-living bonuses. Consideration is being given to the advisability of readjusting the index to allow for curtailed family expenditure on rationed goods, but no final policy has been determined.

• **Washington Checks Up**—Canada is feeling the impact of tighter United States priorities. Since Washington introduced priorities, Canadian authorities have sought to assure United States officials that scarce materials and equip-

ment obtained from the United States were not used in this country more freely than was permitted below the border. Ottawa also imposed domestic restrictions on the use of Canadian raw materials shared with the United States. In some cases, the difference between Washington and Ottawa control formulas made it difficult for Canadian officials to convince Washington that sufficient safeguards were being taken.

Washington is now making, through officials sent to Ottawa, its own close survey of the ultimate results of Canadian restrictions on strategic materials, especially those for which Canada is partially dependent on the United States. Munitions and Supply Minister Howe's aides are satisfied the survey will convince Washington that there is no more wastage here than below the border.

• **Parallel Controls**—To bring Canadian controls more closely into line with those of Washington, Howe's department is classifying all manufacturers and wholesalers, and establishing a system under which the supply of commodities will be controlled through symbols establishing the allocations classification of the purchaser and his relative right to obtain the goods.

The symbols system, applying to all transactions in goods amounting to \$15 or more, is being established under the department's priorities division, and business firms are required to obtain classifications and symbols through regional priority offices.

• **Hard to Keep Step**—In the case of two commodities, sugar and bicycles, Canada's efforts to keep in line with the United States have had an opposite effect. Ottawa placed restrictions on sugar at a time when stocks in this country indicated no immediate need for curtailment. Action was prompted by Washington's curtailment plans. More recently formal rationing was adopted largely on the same grounds. Now Ottawa is in the position of tightening restrictions on sugar while Washington is easing them with its ration bonuses. Ottawa will not adopt the ration bonus plan but will continue curtailments in an effort to conserve shipping space.

Two months ago Ottawa relaxed restrictions in the manufacture of bicycles to permit a 50% increase in output as a means of meeting the transportation emergency and conserving gasoline and rubber. Now that Donald Nelson has ordered production stopped in the United States, Canadian officials feel they may be inviting invidious comparison if they do not do likewise.

• **Fears For the Winter**—Canadians are worried about next winter's coal supplies. Recent statements in the United States that no more than half the normal Canadian requirements of United States coal could be supplied have increased the anxiety of wartime fuel con-



*"Cover-to-cover, the facts indicate
that it is one of the most **USEFUL**
magazines in America today.
Wherever you find it, you find a
business man . . . **well informed.**"*

trollers. In the past, Canada has attempted once or twice to promote the substitution of lignite from the prairie provinces for United States anthracite, but transportation costs and the inferiority of the domestic substitute caused the efforts to peter out. Canadians believe that transportation costs and the shortage of shipping space probably make it impractical to substitute lignite no matter how serious this year's shortage.

• **Standardized Shoes**—Following the recent cut in the price-ceiling bonus to the Canadian shoe industry, the industry has now been placed under a standardization order by the price control administration. The order closely re-

stricts styles, qualities, and numbers of lines that may be manufactured. The standardization plan was worked out by the simplified practices division of the price control authority in consultation with the industry.

Restrictions include: limiting outlay on lasts, patterns, samples; cutting styling expenses to 50% of that for the manufacturer's last fiscal year; limiting the manufacture of samples; banning the use of labels and name stamps; cutting out consignment shipping; and simplifying wrappings.

Some types of women's clothing, especially suits, have been placed under standardization restrictions corresponding to those governing men's clothing.

PRODUCTION

Stopgap Tires

Dow's Thiokol production drive, to provide an interim rubber substitute, soon will reach the pilot-plant stage.

Thiokol, nominee of industry for an interim tire material (BW—Jun. 13 '42, p19), can fulfill one of two destinies. It can be manufactured to amplify the present supply of retreading rubber; and in such a case it will be a boon to several million drivers. Or, it can be manufactured to replace the present supply of retreading rubber, which would be made available for war uses. In the latter case, the position of the civilian driver would not be measurably improved for a considerable time—not at least until the Thiokol retreads come in sufficient quantity to equal the present stock of crude rubber retread, plus those which would be needed to equip the cars of essential war workers.

Sometime later this year rubber administrators at Washington will have to wrestle with that problem and settle the destiny of Thiokol. Until then its effect on the civilian scene is necessarily obscured.

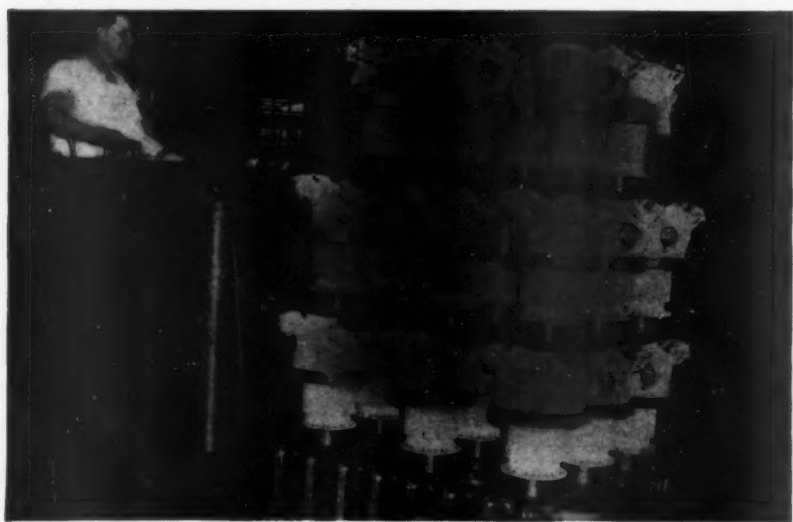
• **Position Assured**—As amplifier or as substitute, Thiokol has an important place in today's rubber supply picture. That is agreed by officials of Dow Chemical Co., developers of the product, by officials of rubber and oil companies, who see it as an interim substitute, by officials of the automobile companies, who count it their number one recommendation to Washington, and by officials of the Rubber Reserve Co., who investigated and then told Dow men, "We are depending on you."

As a result, a three-stage process of manufacture is unfolding today on Thiokol—or polyrubber, as the chemists prefer to call the tire variant of the synthetic.

• **Test Plant Running**—Stage One is in full action. At Midland, Mich., headquarters of the sprawling Dow operations, a small testing plant is turning out five tons of polyrubber monthly. This output is going almost exclusively into testing and analysis.

Stage Two is coming to life. It is a pilot plant being built with Dow money at Midland. Construction began on June 12, and completion is scheduled for Aug. 1. Capacity operations are expected by mid-August, with a rate of approximately 125 tons per month.

The prime purpose of this pilot plant is to provide a blueprint for the government for construction of a volume pro-



Air Power in the Making -

This skid load of 24 double cylinders for military aircraft engines being moved as a unit by BATTERY INDUSTRIAL TRUCK from one process to the next, is a typical example of how modern handling methods are speeding war production.

As the machine operator finishes work on the cylinders, he places them *immediately on the skid*. At the next process, the operator will take the cylinders *immediately from the skid*.

Thus there are no lost motions; no needless picking up and setting down; no time of skilled workers wasted on ordinary handling jobs. Meantime, the trucks keep the work constantly progressing from process to process so that no one waits, either for work or for empties on which to put finished work.

This kind of handling efficiency makes for higher productive capacity and lower costs. Higher capacity to meet war needs today. Lower costs to meet peace-time competition tomorrow.

★ One of a series of advertisements showing how BATTERY INDUSTRIAL TRUCKS are speeding war production by handling materials efficiently.



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STATISTICAL ASSOCIATION**

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GRINNELL "AN" STANDARD FITTINGS
supply gasoline, oil, air and
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GRINNELL FOUNDRY PRODUCTS
help blast the enemy



**GRINNELL
AUTOMATIC SPRINKLERS**
safeguard vital plants and materials

PRODUCING for **V**ICTORY

AUTOMATIC SPRINKLER SYSTEMS to safeguard war production

PREFABRICATED PIPING for power and processing

GENSPRING PIPE HANGERS for high temperature piping in
ships, power plants, factories

FOUNDRY PRODUCTS for tanks and ordnance

TUBE FITTINGS for aircraft

HUMIDIFYING EQUIPMENT to speed production of uniforms,
parachutes, fabrics

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Expansion of facilities to achieve "Victory" production calls for tremendous amounts of piping to furnish Power . . . Fuel . . . Heat . . . Fire Protection . . . Air . . . Water . . . Lubricants to plants, bases, ships, planes and tanks. Grinnell Company enlisted before the shooting started! Our plants are delivering ever increasing quantities of vital war products.

Descriptive literature on any Grinnell product will be gladly furnished. Grinnell Company, Inc., Executive Offices, Providence, Rhode Island. Branch offices in principal cities of United States and Canada.

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GRINNELL GENSPRING HANGERS
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on our fighting ships



Tires recapped with Thiokol poly-rubber are proving themselves in test runs. This one has had 5,000 miles of highway experience to its credit, and some tread still shows, although it is pitted in spots, and cracks are developing. The irregularities where the retread strip joins the original carcass are typical of recapping operations.

Production factory. The Rubber Reserve Co. has handed Dow a letter of intent to spend \$50,000 to design a polyrubber plant of 30,000-ton annual capacity. But instead of designing, Dow is building the pilot plant. The plant will be the design.

Bigger Volume Ahead—Stage Three will be a \$6,000,000 production plant. Its authorization is confidently expected, and its completion is hoped for by the end of this year. It will have capacity of 2,500 tons of polyrubber per month.

Retread strips for tires average five pounds in weight. The 2,500 tons of monthly output in the production plant, therefore, will recap approximately a million tires a month. That is a minimum expectation out of polyrubber. The maximum is twice that amount, at which point the availability of chlorine for manufacturing would begin to dwindle. This total bulks none too large against the 28,000,000 cars on the road last fall.

Quite a Difference—The polyrubber-treaded tires are a far cry from the first-line tires of prewar automobiles. But to engineers declare they are the best solution for transportation on worn carcasses between now and the day, two years or more hence, when top quality synthetic rubber production will permit a tire for every wheel (BW—Jun. 20 '42, p. 15). But along with this declaration, the auto men characterize polyrubber as "chemical garbage".

Polyrubber camelback has to be



MOVING HEAVEN...AND

Transport planes, fighters and bombers are made with the help of many different types of Allis-Chalmers equipment.

**ALLIS-CHALMERS
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IN BEE-BUSY PLANTS producing propellers, engines, complete fighting planes—Allis-Chalmers motors and turbines keep things humming.

To U.S.A.'s fast expanding mining industry—aluminum, iron, zinc, copper—Allis-Chalmers is the world's largest equipment supplier.

At sprouting airports and bases Allis-Chalmers bulldozers and tractors nuzzle tons of earth. Cement—from Allis-Chalmers equipped mills—

is helping to fashion miles of runways.

Our experience in making over 100 different industrial products is aiding the major industry in its war effort. Our engineers help manufacturers produce more—not just with new machinery but with machines now on hand.

And from this everlasting experience is coming rich, productive expansion which will be of great value to the industry, and to America after the war. **ALLIS-CHALMERS MFG. CO., MILWAUKEE, WIS.**



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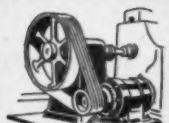
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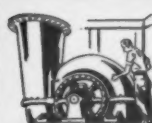
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COMPRESSORS**



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CONDENSERS**



**CENTRIFUGAL
PUMPS**

VICTORY NEWS

Great Lakes Naval Training Station—Long rows of lathes and other machine tools are helping the Navy develop the mechanical skills of the largest group of trainees in its history.

Behind the scenes Allis-Chalmers motors and Texrope Super-7 Drives furnish unflinching power for mechanical installations everywhere in the station.



Somewhere in England a troop transport from the U.S. is serviced by an Allis-Chalmers industrial model tractor.

New Tungsten Mines—The most spectacular strike yet made in America's search for strategic metals is the recent discovery of large new tungsten ore deposits.

One of the new mines will supply about 5% of U. S. tungsten requirements this spring. Others will add still more to the nation's stock!

One of these mines uses an Allis-Chalmers Newhouse gyratory crusher and a new Type "R" fine-reduction crusher. A new Allis-Chalmers 1,000 h.p. hydro-electric plant will supply power for an enlarged mill which is about to be installed. At another mine an Allis-Chalmers crusher is turning out capacity production.

Raleigh, N. C.—To supply crushed stone for new military bases the Superior Stone Co. here is blasting an acre at a time.

Pit run material is routed to an Allis-Chalmers 42 x 48-inch Superior Jaw Crusher, which reduces the rock to the proper size for fine-reduction crushing.



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ILWAUK



welding metals as thin as 32-gauge possible with new Weld-O-Tron.



Allis-Chalmers Equipment aids in the production of all classes of Uncle Sam's warships—from torpedo boats to "battle wagons."

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WE WORK FOR
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ENGINEERING TO HELP INCREASE PRODUCTION IN THESE FIELDS...



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WATER SERVICE



POWER FARMING
MACHINERY



INDUSTRIAL TRACTORS
& ROAD MACHINERY

nursed on the highway at 35 miles an hour; higher speeds might overtax its strength. Its replacement with a new retread will be recommended at 5,000 miles, as a concession to safety and carcass preservation. Thus will the nation squeeze through an interim period from tire wearout time until manufactured rubber reaches maturity or the Far Eastern trade lanes and supply sources are recaptured.

• **Other Drawbacks**—It has other disadvantages aside from limited life. Its distinctive chlorinic-sulphuric odor is not pleasant, and in the still air of a garage for several days it multiplies its unpleasantness. But Dow engineers say they have beaten a more significant problem, "cold flow", in developing polyrubber out of Thiokol. Cold flow means that the tread of a tire left standing for a few days gradually loses pattern, flattens out. The cold flow of polyrubber has been minimized, if not altogether eliminated.

Despite disadvantages, polyrubber is regarded by engineering men as head and shoulders above the other candidates in the "interim tire" field, for three reasons: it can be manufactured quickly, it requires little in the way of strategic materials, and its cost is low.

• **Simple Machinery**—The building of a production plant, naturally, will require steel and some strategic materials in limited quantity. But its machinery will not be any major problem. The equipment for the pilot plant was fished out of Dow discards of the past—kettles, compressors, pumps, pipes. Equipment for large production, likewise, will not impose grade-A procurement headaches.

The materials for polyrubber flow partially out of Michigan brine and are in abundance elsewhere. Simply stated, salt and sulphur, two mainstays of most Dow production, are joined into polysodium sulphide. Oil and chlorine are united into ethylene dichloride. Properly combined, these chemicals form polyrubber.

Chlorine is the only material of the basic four now on a restricted basis. But chlorine can be shipped only when converted to liquid. Dow's production of chlorine gas exceeds its conversion facilities. The excess can produce 2,500 tons of polyrubber a month without pinching the war program. Dow surveys of other plants convince officials that enough surplus ethylene dichloride is available throughout the country to double that production volume, but no more. Hence a ceiling is visible of 5,000 tons of polyrubber per month, or 2,000,000 retreads twelve times a year.

• **Competitive Pricing**—Cost is the third favorable detail in polyrubber's brief. Materials are inexpensive. Labor requirements diminish as the size of output increases, and they involve comparatively few technical and skilled people. A prime consideration is the amortization of facilities, particularly when their

life expectancy may be short. Profit is hardly a major matter for Dow, already operating in high surtax brackets. These factors, plus normal merchandiser's margin, point to polyrubber camelback's being saleable at prices comparable to natural crude rubber retreads, which range roughly from \$4 to \$8 at today's OPA ceilings, depending on grade and size.

Use of polyrubber camelback in retread shops is similar to the handling of natural rubber, with one exception. No cement is needed to bind the retread strip to the carcass.

• **Road Tests**—Test tires have been on the road since April. Today many of them have passed 5,000 miles of wear, somewhat bedraggled for the experience, but still functioning.

It's Kok-saghyz Time; Seed Crop's In

At 23 state agricultural experiment stations this week excited scientists carefully harvested a crop of Russian dandelion seeds, then hurried to report to the Department of Agriculture. Washington wanted to know the condition of the plants from which the feathery seeds had been collected.

Cause for all the excitement is the fact that this Russian cousin of the common American dandelion may become an important source of natural rubber if this year's experimental crops are a success (BW—Feb. 28 '42, p17). The Soviet Union calls the plant kok-saghyz, and devoted more than 2,000,000 acres to its cultivation last year.

While kok-saghyz looks somewhat like the American dandelion, it contains more rubber in its lactiferous roots. In part this is due to the fact that nature gave it more rubber to begin with, and in part to the fact that Russian agronomists over the last 15 years have increased this percentage by breeding and selection.

There are three reasons why Washington is especially interested now in kok-saghyz:

(1) Rubber experts admit that they have found no satisfactory way of making large, heavy-duty tires entirely from synthetic rubber (BW—Jun. 20 '42, p15). With natural rubber supplies in southeastern Asia now in the hands of the Japanese, Washington is left to rely on small deliveries from Central and South America, and from new sources such as guayule and kok-saghyz, for the minimum supplies

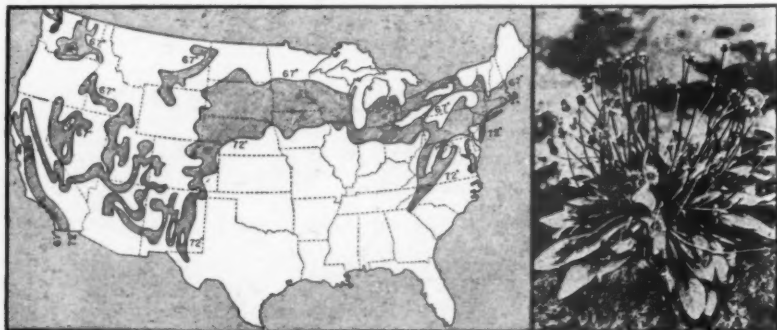
of raw rubber necessary as a "mixer" in the new synthetic program.

(2) While healthy rubber trees in Malaya yield 800 to 1,000 lb. of rubber to the acre, and the guayule shrub (BW—Jun. 27 '42, p42) yields up to 350 lb., compared with 30 to 60 for kok-saghyz, it takes from five to seven years after planting before a rubber tree begins to bear, and four years after guayule is planted before it can be harvested economically. But kok-saghyz can be planted in the spring, a seed crop harvested in the summer, and the root crop (rubber) in October.

(3) Soviet scientists have perfected not only the kok-saghyz plant but the method of extracting the rubber from its roots. Presumably the details of this process have been made available to Washington as a part of the two-way lend-lease deal recently negotiated with Moscow.

The two tons of kok-saghyz seeds which arrived in Washington by plane from Kuibyshev on May 8 were delivered to experiment stations in most of the northern states (map below), Canada, and Alaska. These are the plants that have already produced a seed crop, and will be harvested for their rubber content in October. But later shipments will be planted at stations in the Southwest during fall for spring harvesting.

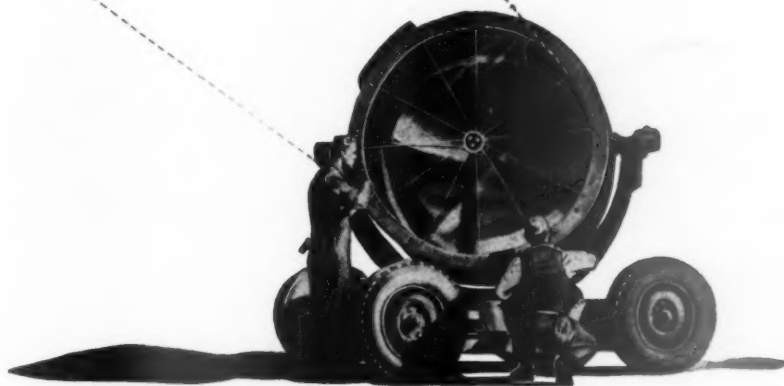
Russians have known kok-saghyz since the days of Peter the Great, but until recently, if they used it at all, it was for chewing gum. "Kok" in Russian means root, and "saghyz" means to chew.



ANOTHER JOB FOR

TUF-FLEX

The Glass with the Iron Constitution



IN ONE OF AMERICA'S great electric companies they're making searchlights of 800,000,000 candle power. That's as much candle power in one searchlight as is required to floodlight four major league ball parks, or illuminate twenty thousand homes!

This terrific energy, concentrated within a diameter of sixty inches, is enclosed behind a face of glass . . . a shield that permits the powerful finger of light to split the night sky, come fair weather or foul.

It takes a glass with an iron constitution to do this job . . . *another* job for Libbey-Owens-Ford TUF-FLEX Heat Tempered Plate Glass!

The ability of TUF-FLEX to stand up under the extreme temperature differences imposed on the two faces of this glass is a practical demonstration of its unusual strength and resistance to thermal shock. Compared with ordinary plate glass, TUF-FLEX is three times more

resistant to thermal shock, three times more flexible, and five to seven times stronger. And it's a safer glass, too, for when TUF-FLEX is fractured, it literally disintegrates into relatively harmless small crystals.

Flat Glass May Answer Your Problem

TUF-FLEX is only one of many modern L·O·F flat glass products which today are opening up entirely new fields for the practical use of glass. Many manufacturers, pinched by the shortage of critical materials, have been able to continue their production through use of an L·O·F glass.

Make sure that your company's production officials and designers are fully aware of the many types of glass that L·O·F research has perfected. Here may be the answer to your product problem. The facilities of our company are at your service. Libbey-Owens-Ford Glass Company, 1366 Nicholas Building, Toledo, Ohio.



LIBBEY·OWENS·FORD

QUALITY *Flat Glass* PRODUCTS

Pipelines of Clay

Ambitious plans hinge on experiments which may be made with gravity-flow oil ducts of ceramic tile. Engineers busy.

Watch for news almost any time of an experimental new 65-mile pipeline to run oil from the Tinsley Field in central Mississippi to oil barges on the Mississippi River at Vicksburg for upriver transport via the Ohio River to Pittsburgh and the petroleum-hungry East. If it does go in, it will command atten-

tion because it will be constructed of ceramic tile, and because it will run its full course by gravity.

• **Getting Ready**—Right now, two member companies of the Clay Products Assn. are working hand in hand with Standard Oil of Ohio to determine optimum sizes and types of pipes, pipe joints, etc. Although a gentle up-slope here and there will not interfere with full gravity operation, surveyors in the field are seeking all the down grades possible. Lawyers are negotiating for rights of way.

Behind these activities are plans for a vastly more ambitious project—a gravity clay line over 500 miles down the valley of the Arkansas River from the Okla-

homa fields to a point on the Mississippi River about 20 miles north of Arkansas City. And if that works out, other oil interests might cooperate in running a still longer line down the Red River Valley from the Texas Panhandle to the junction with the Mississippi, a few miles northwest of Baton Rouge. This line could also be made to tap the East Texas Field.

• **And So to Bayonne**—If the Arkansas River line or the Red River line goes in, or both, present planning calls for a huge new fleet of barges for the upriver haul to Pittsburgh, and a 250-mile steel pressure pipeline to force oil over the mountains of Pennsylvania to connect with a 100-mile gravity clay line for the final run into the refineries of Bayonne, N. J. If the oil were to run in a steel line, of orthodox construction all the way from Oklahoma to New Jersey, 660,000 tons of steel would be required. Proponents of the unorthodox part-clay, part-barge, part-steel line estimate that it would take no more than one fourth that much steel.

Clay for pipe is plentiful, so is wood or concrete for barges. The biggest thing to determine, next to the availability of steel and pumping equipment for the 250-mile Pennsylvania line, is the size of clay pipe for the gravity lines. Steel pipe can take pressures up to 1,500 and 2,000 lb. per sq.in.; clay pipe has seldom been asked to do pressure service, but probably can take 300 lb. per sq.in. safely.

• **Testing the Theories**—Theoretically, a 40-in. pipe will carry the same amount of oil at 300-lb. pressure as a 20-in. pipe at 1,200-lb. pressure. Also theoretically, a vitreous-coated clay pipe should not scale up as rapidly as a steel pipe, hence in the long run should carry more oil with less friction.

Actually, the engineers will not know all they need to know about the behavior of clay pipe until the 65-mile experimental line is laid. And even then they may have to refigure pipe specifications for the different grades, hence hydraulic heads, which they will encounter in the valleys of the Arkansas and Red Rivers, and in the comparatively sharp drop in altitude from the Pennsylvania highlands to sea level at Bayonne.

• **Clay Used for Brine**—Fortunately for the peace of mind of the engineers, they have a considerable body of data on several clay pipelines, totaling about 200 miles, which have been operating several years in California to dispose of brine from various oil fields. Since this waste carries 4% to 5% of crude petroleum in suspension with certain other chemicals and neither corrodes nor scales the vitreous lining of the pipe, the engineers believe they are safe in going ahead with its installation for handling straight crude.

With freedom from scale formation goes a reduction in sludge and slime for-



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At Washington National Airport

... a hook-up of 19 microphones, part of the OPERADIO paging system in the huge airport building, announces schedules... directs traffic... locates individuals for long-distance calls and telegrams. This same system of OPERADIO Sound—"The Voice of Production"—is doing 24-hour duty in war plants... speeding operations, conserving executive time, helping win the war. Write Operadio Manufacturing Co., Dept. B-3, St. Charles, Ill. Export Division: Operadio, 145 West 45th Street, New York City.

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CONTROL

nation, hence more widely spaced periods for cleaning, an advantage which somewhat offsets the higher cost of a clay line with large pipe for gravity operation.

• **Other Substitutes**—Meanwhile, as the preinstallation calculations for the 65-mile line go forward, officials and technicians in the Substitution Branch of WPB's Conservation Division (until last week's reorganization, the Bureau of Industrial Conservation) are investigating many substitutes for the steel or cast iron pipes which have always been used in oil lines.

Kraft paper pipe would be a promising candidate were it not for the fact that it requires phenol-formaldehyde plastic to bond its laminations into a unit. Both phenol and formaldehyde are almost as hard to get as steel.

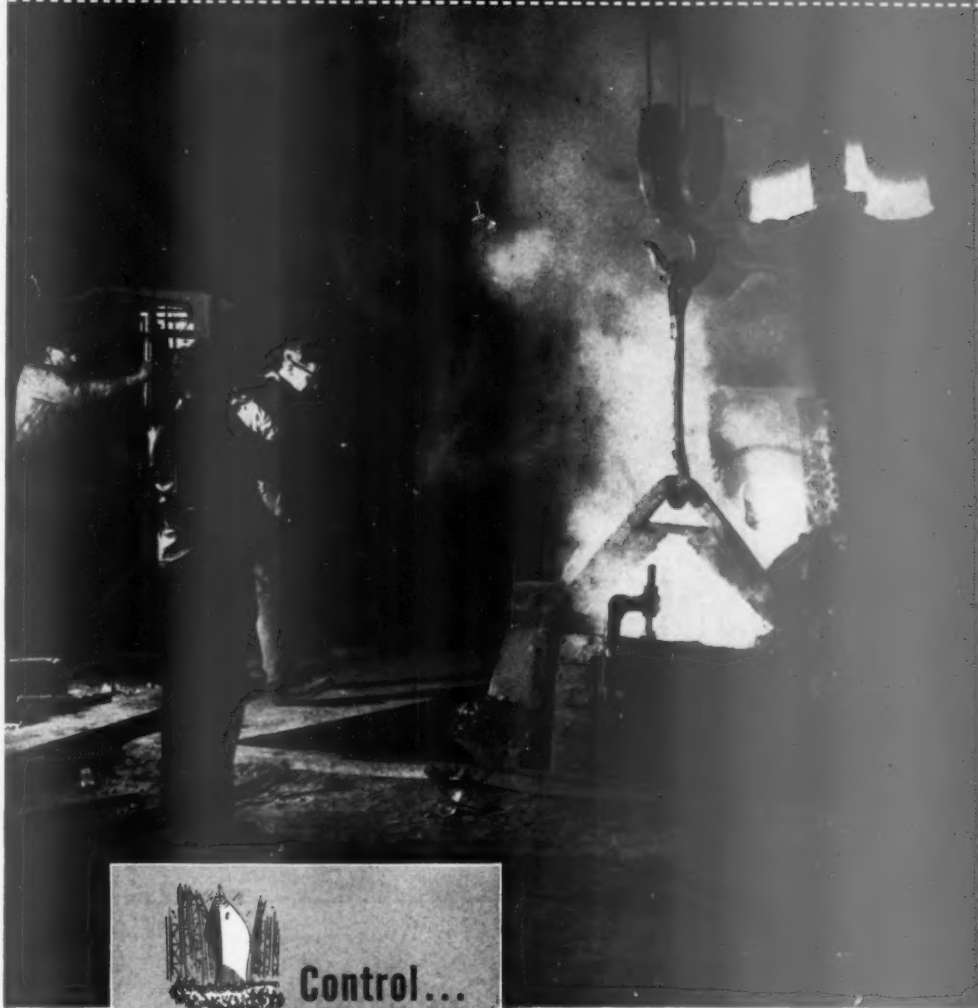
• **Wood's Limitations**—Wood pipe is excellent for carrying water, which continually saturates it, keeping the joints between its staves tight. Oil, strangely enough, tends to dehydrate wood, loosening joints and causing leaks. Furthermore, there might be trouble in securing priorities for steel wire or banding to hold pipe staves in position.

Concrete pipe reinforced with steel is probably out because of its steel component, and likewise concrete reinforced with asbestos, another critical material. Best hope for concrete pipe lies in a new glass fiber reinforcement which is now the subject of intensive experiments. Initial strength characteristics are excellent. What the experimenters are now trying to determine is the effect over a period of time of calcium compounds in Portland cement on glass.

• **Clay vs. Glass**—Best bets thus far are clay and glass, and the "wise money" is going on clay until some experiments on glass pipe reinforced with concrete are completed. Mississippi Glass Co. has been working for some time on a pipe made up of three or four strips of heavy window glass, each bent to form a segment of a cylinder, with edges lapped to fit each other tightly, and held together with concrete poured around the whole.

The glass component will withstand crude oil all right, as witness the vitreous (or glass) lining of clay pipe under the action of oil well brine. The question is whether the concrete component withstands pressure without steel use.

• **All-Glass Pipe**—It is not likely that unbacked all-glass pipe of the type made by Corning Glass Works for the chemical industries will serve in oil lines because (1) its standard sizes run only up to 4 in. inside diameter, (2) it is not recommended for pressures above 75 lb. per sq. in. Its maker, however, has turned out special lots in diameters up to 18 in., could go to larger diameters if priorities could be arranged for necessary mold steels, but would probably have to develop some sort of reinforcement.



**Control...
the Critical Factor
in Ship Launching
or Steel Casting**

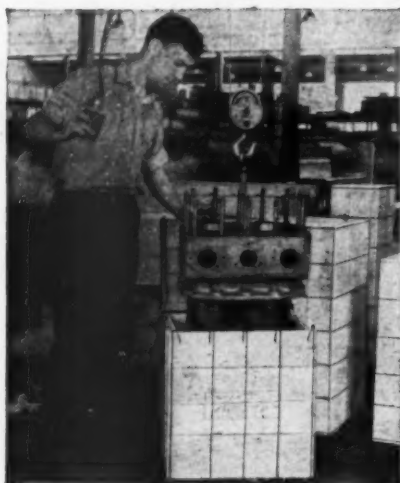
WHETHER the ship is launched by burning away anchor plates or by hydraulic trigger in a pit beneath the hull, it's careful control of the operation that sends her sliding smoothly down the ways...

... keeps her from running wild and suffering damage before she has made a single voyage. ☆ Steel castings, too, have a "launching point" ... melting ... and here, too, control is the critical factor. Lebanon has combed the fields of equipment ... methods ... and, yes, of men ... and chosen those that would make the greatest contributions to control. Optical pyrometer readings (illustrated above) are taken of every melt. ☆ In melting, the premium on quality is careful control. Lebanon pays that premium in full. That's why Circle **Q** Castings are the choice of users who cannot run the risks of the "pretty good" ... such manufacturers as Sperry Gyroscope and Waterbury Tool.

LEBANON STEEL FOUNDRY, LEBANON, PENNSYLVANIA

ORIGINAL AMERICAN LICENSEE GEORGE FISCHER (SWISS CHAMOTTE) METHOD

LEBANON  *Stainless and Special Alloy*
STEEL CASTINGS



KNOCK DELAY out of your delivery schedule

● War products are reaching the armed forces sooner . . . getting on defense plant assembly lines ahead of time—thanks to Engineered Shipping Containers. Knocking delay out of delivery schedules—General Containers assure quicker assembly and packing, faster closing, easier opening for inspection.

General Containers are helping many war products producers beat shipping promises by saving man-hours in packing, handling and shipping all the way to destination. They are conserving space in ships, trucks, trains and in the shipping rooms. Tare weight is reduced. And the protection features of Generals assure safe arrival in perfect condition.

Don't let delays in your shipping schedule nullify your increases in production. General Box skilled technicians will help you determine the box, crate or special container which will best meet today's requirements. Mail the coupon for the free booklet—there is no obligation.

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General Offices: 502 N. Dearborn St., Chicago, Ill.
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- ☐ Send copy of free booklet describing engineered General Containers.
- ☐ Have a General Box engineer call.

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NEW PRODUCTS

Gas Gun

You don't need a match to light the Gas Gun, the new automatic acetylene torch now being introduced by Gas Gun Co., Salem, Ore. Just pull the trigger, and an inbuilt flint strikes the light. Release the trigger to extinguish the flame unless you wish to set a handy trigger lock to keep it burning.

Since the gun is small, weighing only 20 oz., it can get into all sorts of



cramped spaces for soldering, silver soldering, light brazing, lead burning, etc. It connects by hose with a standard acetylene tank. An auxiliary regulator controls gas pressure within a range of 1 to 10 lb.

Oil Absorbent

Speedi-Dry is a granular new oil absorbent for removing oil from floors and thus eliminating the hazards of fire and accident. Its maker, Waverly Petroleum Products Co., 478 Drexel Bldg., Philadelphia, describes it as having "such tremendous affinity for oil and grease that its regular use draws old stains from floors, as well as removing new accumulations."

Plastipitch

No zinc or other scarce material is used in the Plastipitch Process of weatherproofing all kinds of metals including corrugated steel roofing, siding, fabricated shapes, etc. Developed by Coated Products Corp., Verona, Pa., the process uses a pitch of improved plastic characteristics which is applied after shaping and forming. If a product must withstand tropical heat or arctic cold, a special coating can be formulated to meet a specific condition. Several colors and finishes are available.

Industrial Cleansing Tissues

"Kimpak Creped Wadding" is the name given by Kimberly-Clark Corp., Neenah, Wis., to its new disposable, cellulose wiping sheets, but shop operators who have tried them for clean-



ing and polishing machinery, machine parts, instruments, goggles, plastics, glass, etc., are already calling them "Kimpak Wipes." They are creped for rubbing strength, yet are absorbent enough to pick up dust, oil, and grease.

Fire Extinguisher Box

Because there is always a chance in wartime that a saboteur may tamper with an unprotected fire extinguisher by filling it with gasoline, emptying the acid bottle in a soda-acid type, extracting the carbon dioxide cartridge in a



gas-pressure type, or whatever, the Erie Supply & Equipment Co., 426 Huron Ave., Sandusky, O., is bringing out the new Tam-Pruf Box.

It is a sturdy all-metal case with a glass window in the side of inspection. The padlock does not have to be opened to get at the extinguisher in an emergency. You simply press on the "breaker arm"; a glass lock seal (patent pending) breaks instantaneously, the door opens.

MARKETING

Nugent's Panacea

Proponents see buy-now, drive-later plan as salvation of dealers, a postwar shock absorber, way to finance war.

Scratch a durable goods dealer these dark days, and he's apt to tell you that his woes would vanish if only the government—or a combination of big manufacturers and suppliers—would adopt the Nugent Plan.

• **When-and-As Purchases**—Rolf Nugent, chief of OPA's consumer requirements branch, has launched what is probably the most-talked-about economic theory of this war. It calls on the consumer to pay for something now and take delivery after hostilities are over. Frequently labeled "instalment selling in reverse," the Nugent Plan has inspired so many reports, speeches, and resolutions among trade associations that Leon Henderson a few days ago asked Nugent to put the final polish on his handiwork. Meanwhile, Treasury and Federal Reserve Board officials are interestedly peering at it.

Actually, Nugent—who's on leave from the Russell Sage Foundation where he is director of consumer credit studies—did not invent the basic idea. That goes back into economic history. He did, however, bring it up to date so that it might emerge from the test-tube stage.

• **A Sample Transaction**—Here, by way of example, is roughly how a transaction might be carried out if the Nugent Plan were now in effect:

Assume John Brown, earning \$75 a week, finds that the amount of goods his money will buy is diminishing, and wants to be assured of such as soon as the war ends. He therefore betakes himself to his auto dealer and announces he wants to buy a postwar car, agreeing to pay for it now in monthly instalments.

The auto dealer would give Brown a book whose cover bore a legend something like this: "Auto Coupon Book; July, 1942 Series." Brown thereupon would make his down payment (say \$50 on a \$750 contract), and the auto dealer would paste \$50 worth of stamps into Mr. Brown's coupon book. Then the \$50 would go to the U. S. Treasury, less 6% commission on the whole \$750 deal. The Treasury then would convert the cash into something akin to a war bond.

• **Finance Firms' Job**—Every month thereafter, Brown—stimulated by advertising and sales talks on the part of the



Ships are finished faster when this brush scrubs the steel

• **Designed for swift, thorough removal of scale and rust from big steel sections such as ship plate and structurals, this Osborn cup brush is speeding the cleaning of new hulls in virtually every important shipyard in the country.**

Rust and scale and welding slag are saboteurs to which every ship is prey. They must be completely eradicated from the entire hull before painting. That's a big job. It cannot be done as swiftly as it must be done unless the fastest, most efficient tools are used.

That's why Osborn power-driven cup brushes—big, husky, and long-lived—are the No. 1 choice for this job in the nation's shipyards today. Osborn's special disc-center design, with a double row of wires held by a knot-type anchor, permits a free brushing action that greatly reduces flexing, fatigue, and breakage of wires. Soundly designed and soundly built, they work faster, last longer.

These Osborn cup brushes scrub down a ship swiftly and thoroughly, removing mill scale and rust from plates and structural members, and slag from welded seams. Like other Osborn power-driven brushes, they're adaptable—they fit all standard power tools, air or electric. Like the rest of the Osborn line, they're proving their quality and value by speeding production of the tools and weapons this country of ours so urgently needs. *The Osborn Manufacturing Co., 5401 Hamilton Ave., Cleveland, Ohio.*

WORLD'S LARGEST MANUFACTURER OF BRUSHES FOR INDUSTRY





**SKI
POLE
POINTS**
for example

Made on equipment regularly used in the manufacture of HASSALL special nails, rivets and screws. Thousands of similar examples. Catalog free.

**JOHN HASSALL
INC.**
408 Oakland Street
Brooklyn, N.Y.
Established 1850



It is

Direct
Thorough
Fast
Effective
Economical

"clues" non-display advertising to the active Management readership of Business Week, for EMPLOYMENT — BUSINESS — EQUIPMENT "OPPORTUNITIES" offered or wanted. Rate 50 cents a word; \$5 minimum. Copy August 3 for August 8.

**HANG UP YOUR
FILING TROUBLES**
in the filing folder that

HANGS!

**Oxford
PENDAFLEX®
FOLDERS**
reduce filing time 20%.

Eliminates most misfiling!

NO NEW CABINETS
a simple frame fits in file drawer and folders hang in file!

transforms filing from laborious searching to

**INSTANT
VISIBLE
REFERENCE**

**MAIL COUPON
FOR
FREE
PENDAFLEX
FOLDER**



THE OLD WAY



THE NEW WAY

* REG. U. S. PAT. OFF.

**SEND NOW
FOR FREE
SAMPLE**

OXFORD FILING SUPPLY CO.
350 MORGAN AVE., BROOKLYN, N. Y.

Yes! Send me a FREE sample of your Oxford Pendaflex Folder. No cost or obligation, of course!

NAME _____

FIRM _____

ADDRESS _____

CITY _____ STATE _____

auto dealer—would paste more and more coupons into his book. He would not buy these additional coupons from the auto dealer but from a sales finance company which, for lack of normal business, would function as an agent of the U. S. Treasury, getting 1% of the \$750 for its trouble.

Finally Brown would fill the book. He would have paid in perhaps \$700 rather than \$750, the difference of something like \$50 representing what the Treasury allows him in lieu of interest.

• **Fluctuating Interest**—It stands to reason that Brown would hope more than ever that the war would end in a hurry. For if hostilities last a long time, the flat Treasury allowance wouldn't be any great shakes as an interest rate. If the war would end in a hurry, the profit would be a beauty.

When civilian production was resumed, the Treasury probably would announce that it wouldn't redeem all the coupon books at once, for that would turn loose too much consumer buying all at once. The first batch of redemptions might be those marked "July, 1942 Series." That would include Brown.

• **Could Buy Any Kind of Car**—Coupon book in hand, he once more would visit the auto dealer. This dealer presumably could save his business by means of his 6% commission.

A unique feature of the plan would permit Brown to change his mind about what kind of car he wanted because the coupon book would be good for any make or model of auto. A finance company would arrange to advance any additional cash needed.

The Nugent Plan could be used for refrigerators, washers, ironers, and all durable goods. Its disciples insist it would keep dealers alive on commissions, rescue sales finance companies, close the "inflation gap" to a certain extent, provide more money for the war, and create a backlog of orders to prevent a disastrous postwar depression.

• **To Encourage Spending**—Merchandisers believe that, aside from the strictly economic angles, the plan has enough emotional appeal to put it across. It encourages people to spend their money, and at the same time actually help the war effort. Right there, insist the merchandising converts, is where Nugent has it all over the Treasury whose war bond campaigns have the stodgy appeal of laying aside for a rainy day.

But there is an opposition that contends: (1) Regardless of all safeguards, the plan simply would transfer inflation from the present into the future; (2) it would cause the rich to buy up coupons, not for the sake of merchandise, but because they might believe the coupons would give a better interest yield than bonds; (3) it would make the government dictator over the distribution of

durable goods, because coupon-purchasers would have to get a priority guarantee on merchandise.

Nugent and others with similar plans want to avoid these pitfalls by making coupons nontransferable, applicable only in specific fields (auto coupons couldn't be used to buy refrigerators), and hedging with numerous detailed safeguards, including penalties for failure to pay up instalments as they are due.

• **Some Obstacles**—Whether the plan actually will be adopted by the government (private sponsorship wouldn't be nearly so effective) is hard to say. The Treasury may regard the plan as a competitor to the war bond drive. And it may not wish to make a lot of big, new advertising expenses deductible from taxes. Nevertheless, Nugent has some backers in the government and there's a swelling army of tradesmen insisting that his plan be given a fair trial.

Door-to-Door Eclat

Welcome Wagon, Inc., shows what low-pressure selling can do in calls on newcomers. National advertisers participate.

John Jones, skilled machinist, gets a job in a Bridgeport, Conn., war plant. After a couple of weeks Mrs. Jones arrives with their two children and the Joneses install themselves in a new home. Chances are that before Mrs. Jones has unpacked the first barrelful of their household goods, a woman will be standing on the threshold with a flower-decked basket crammed with an assortment of gifts ranging from a copy of the morning paper to a toy for the youngest child.

• **Low-Pressure Selling**—The lady with the basket is one of the ubiquitous representatives of the Welcome Wagon Service Co., whose specialty is snagging a newly-arrived housewife and loading her up with greetings, gifts, and sales promotion from local merchants before she has had time to hang the curtains.

The commercial side of the presentation is sweetened by the fact that Welcome Wagon's representatives, all personable ladies, are equipped with letters of greeting from the mayor or chamber of commerce, and dispense information on bus routes, churches, schools, plus invitations to local P.T.A. or garden clubs.

• **National Clients Now**—Welcome Wagon, which celebrates its fourteenth anniversary this month, started out in Memphis, Tenn., back in 1928. Today, the company has some 900 representatives in over 600 cities with a population of 8,000 or more, including 49 cities in Canada. It represents approximately 8,500 companies in 105 different types of business but it handles no

CONVERT YOUR ADVERTISING TO

War-time Needs

MANUFACTURERS are digging deep their data files these days for specific information to answer the problems the men on the war-production lines. They're converting their business paper advertising into educational channels.

They're coordinating and speeding up a country's war effort by telling —

... HOW to get top performance out of present equipment.

... HOW to make this equipment last longer.

... HOW to salvage old materials and equipment.

... HOW to use new or substitute materials.

... HOW to train new, inexperienced employees.

... HOW to get technical assistance and complete product data.

MORE INFORMATION WANTED

We've made hundreds of calls on readers of McGraw-Hill publications during the past three years, asking what they want to know about products and services.

Every manufacturer possesses a vast reservoir of technical knowledge about his specific products and services. Are you digging deep into yours and contributing the kind of information that will be helpful to the hard-pressed men on America's production lines?

ices. This field work is being stepped up, and intensified, now. And they're telling us plenty! They're asking for HELPFUL information—useful information—SPECIFIC information . . . and the need is more urgent than ever before.

That's why today's advertising pages, in good business and industrial publications, are so filled with "Service" and "How to" copy. For where else—whether you've something to sell, or a helpful message for a hard-pressed man with a problem—can you talk to the chemist, the mining man, metallurgist, machine tool designer or electrical engineer, but in the publication that is specifically designed to serve his basic interests?

WHAT CAN YOU SAY?

Here's a series of booklets packed with suggestions . . . actual examples of how advertisers are helping their customers . . . and themselves—and contributing to the war effort. These booklets show how helpful information is being tailored to the needs of specific industries. Check the coupon on this page for the booklets you want and we'll be glad to send them.

COUPON

Here are the specific industries covered by the free booklets pictured on the opposite page. Check the field (or fields) you are interested in and mail this coupon to McGraw-Hill, 330 West 42nd Street, New York, N. Y.

MECHANICAL DESIGN

1. What Mechanical Designers Want in Advertising Copy Today. Field interviews with design engineers — actual advertisements that talk their language in **PRODUCT ENGINEERING**.

ELECTRICAL

2. "KNOW HOW" Advertising is Helping to Win the War. Current problems of the electrical field — how advertisers are helping meet them in **ELECTRICAL WORLD**.

3. How manufacturers are helping solve the problems of Electrical Contractors and men in charge of electrical departments in large plants. Actual advertisements from **ELECTRICAL CONTRACTING**.

4. Technical and Practical data on the vastly expanding electronics field. "What to say" suggestions for **ELECTRONICS** advertisers.

CONSTRUCTION

5. What Advertisers Are Saying to the Engineered Construction Industry today. How manufacturers are making their copy informative and productive in **ENGINEERING NEWS-RECORD** and **CONSTRUCTION METHODS**.

MINING

6. Advertising in War Taps serves the essential mining industries. What manufacturers are saying to the readers of **COAL AGE** and **ENGINEERING & MINING JOURNAL**.

POWER

7. The kind of advertisements that will interest, and be helpful to Power engineers and consultants. Actual examples from the advertising pages of **POWER**.

TEXTILES

8. Reproduction of pages from current issues of **TEXTILE WORLD** — showing how editors and advertisers are contributing to the Win-the-War Program.

CHEMICAL

9. How to Develop Advertising that Clicks with Chemical Engineers Today. Helpful comments, suggestions—and many actual advertisements from **CHEMICAL & METALLURGICAL ENGINEERING**.

FOOD

10. A Guide to Effective War-time Advertising in **FOOD INDUSTRIES**. How advertisers are meeting current needs in this important field.

METAL WORKING

11. Questions in the Minds of the Metal-Working Production Men Today—and How Advertisers Are Answering them in **AMERICAN MACHINIST**.

Name

Title

Company

Address

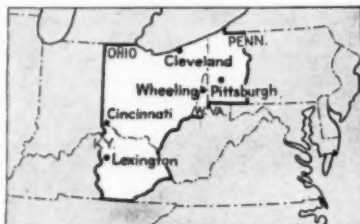
McGraw-Hill Publishing Company, Inc.

330 WEST 42nd STREET, NEW YORK, N. Y.

The Regional Market Outlook

CLEVELAND (Income Index—155.6; month ago—154.6; year ago—131.5)—Accelerating operations at war plants, concentrated largely in the big centers of this Reserve district, continue to lift income payments. But as labor reserves shrink (BW—Jun.13'42,p60), workers are drawn away from rural areas and small cities, even as far off as south-eastern Ohio and eastern Kentucky.

There are, of course, boom towns like Windham (near Ravenna); and Marion,



74,027 sq. mi.

pop. 11,809,528

RICHMOND (Income Index—175.2; month ago—172.7; year ago—140.3)—Months of critical weather for this district's agriculture are at hand. Prospects thus far are good. Tobacco growth is ahead of schedule, and shipments to next month's early markets will be heavy. Cotton plantings are not up much, but crop condition is better than last year's. Prices may go higher if Congress votes 100%-of-parity loans.

Not only will the Carolinas benefit most from increased tobacco and cotton incomes, but pasturage and hay condition also is best there. And, though farm labor is not as scarce as had earlier been feared, the supply still is tightest in Maryland and Virginia.

In the north, of course, industrial expansion has been sharpest. Baltimore aircraft and merchant-ship payrolls are still rising fast, and government employment is soaring at Washington. And Hampton Roads' experience in building

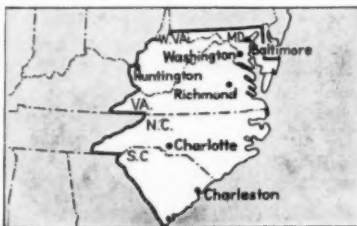
Lima, and Springfield are busy with depots, heavy metal work, and arms orders. But, Newark, Mansfield, Coshocton, Ashland, Meadville, etc., dislocated by metal priorities, are losing labor.

The ceramics belt, around East Liverpool and Zanesville, is still working at capacity. But peacetime orders—from home building, civilian metal enameling, etc.—are falling off while wartime uses are rising. Not only is net demand now uncertain, but critical materials may run short. Along the Ohio River, barge traffic has been running high; but here, too, while more coal and oil are being shipped, less steel is.

Farm hands are short, and wages high. But agriculture, notably near the big cities, is prospering. Receipts—largely from meat, eggs, and milk—have gained as much over 1941 as the nation's. And so far, the weather has been kind to pastures, hay, and other crops, helping livestock production.

aircraft carriers will bring further awards under the new naval program.

Virginia has also been a concentration point for military bases—at Alexandria and Arlington, Petersburg and Blackstone, as well as Hampton Roads. Aberdeen, Odenton, and Port Deposit, Md.; Durham, New Berne, Jacksonville, and Fayetteville, N. C.; and Spartanburg and Columbia, S. C., are other major camp sites. New air schools are being spread all through the Carolinas.



152,471 sq. mi.

pop. 12,330,219

TWIN CITIES (Income Index—151.7; month ago—153.8; year ago—125.2)—One way or another, the weather is the chief summer worry in this agricultural region. Lately, too much rain and cold have cut potato prospects, reduced the lamb crop, delayed vegetables. And corn and flax need more sun.

But on the whole, the farm outlook is good. The winter wheat harvest may be off 25% from 1941 in North Dakota and Montana, but partly that is due to



412,304 sq. mi.

pop. 5,542,966

an acreage cut. Prices depend on Congress' action on loan rates. Other small grains are in good growth, and range, pasturage, and hay condition all through the district is markedly improved over a year ago. That helps beef, milk, and egg output, and it is in livestock products that the sharpest farm gains are to be expected.

As a result, current receipts are running highest in eastern parts of the district (BW—Jun.13'42,p60). Increases over 1941 in Montana and the Dakotas have been below average.

Most industrial gains are in the east, too. Ordnance work here, shipbuilding in Duluth-Superior, and iron mining up around Hibbing are accelerating, lifting payrolls. Elsewhere, copper and lumber output, construction volume, and activity in food lines is just about holding steady. Meanwhile, labor reserves are drained off to arms areas, even those outside the district.

more than one firm in a given line of business in any single community. For the past year, Welcome Wagon has been advertising its service in nationally-circulated trade papers and magazines, for the company has begun to do a sales job for a few national manufacturers.

The war, of course, has boomed Welcome Wagon's business in many localities—defense cities like Norfolk, Va., Seattle, Wash., and Washington, D. C., where the influx of newcomers is now breaking all records. In Cleveland recently, Welcome Wagon's four representatives handled 127 families in a single week. That's considered a pretty good record in view of the fact that calls take as much as an hour apiece.

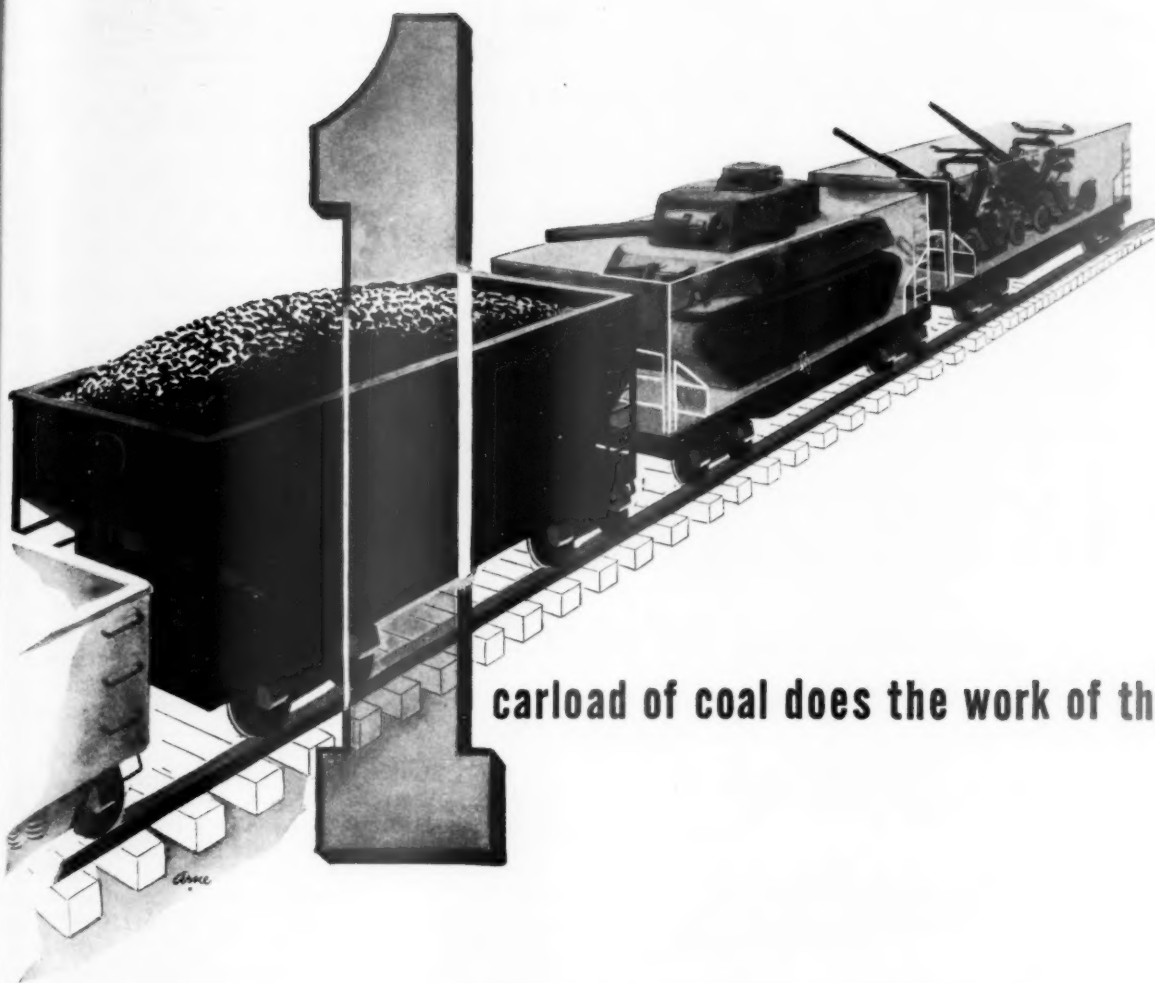
• **Brides and Mothers, Too**—Welcome Wagon's founder, sole owner, and moving spirit is a soft spoken, southern gentleman, Mr. Thomas W. Briggs. Originally, the idea was to "tap" only the "newcomer" market, but Welcome Wagon has now extended its service to include new mothers, brides, and engaged girls. Newcomers, however, are still the backbone of its business.

Welcome Wagon finds its genesis in America's pioneer history. In the early days, Western communities would send wagons with food and water to greet caravans coming from the East in the hopes of persuading them to continue the trek no further. These greeting parties came to be known as "welcome wagons."

• **High Hostess Standards**—The Welcome Wagon organization is built squarely on its community representatives—usually only one to a town, but as many as six in a few larger cities. These ladies, who are kept free from any taint of commercialization, are known as "hostesses" and they are definitely "upper crust" in their communities. A Welcome Wagon hostess must be between 25 and 40, must own and drive a car, and must be able to operate a typewriter.

Hostesses must be able to turn their hand to a variety of jobs. They may have to get the gas turned on and the phone installed for newcomers or fix the baby's formula for a young mother. The lengths to which they will go may be judged by the hostess in one New Jersey town who recently drove a new resident's children over to the nearest public school, registered them, and arranged their courses. Often hostesses expand their activities to include the formation of newcomers' clubs or to arrange teas and benefits. They are definitely civic-minded, have the community and nation's welfare at heart. Today, they are distributing war bond booklets for the Treasury Department.

• **Close Client Relations**—After the social service warmup, the hostess obviously is in a prime position to put over her sales talk. Hostesses are not required to patronize the businesses they rep-



carload of coal does the work of three

The railroad coal car . . . a mute witness . . . reveals one contribution to the success of our global war that results from twenty years of progress in the generation of electrical energy.

In World War I it was necessary to burn 3.39* pounds of coal to produce one kilowatt hour (enough juice to light a 50 watt bulb for 20 hours). By contrast, the same amount of electricity is produced today from only 1.3* pounds of coal.

Thus, a single coal car, transporting fuel to a central station, now does the work of three. And our

burdened railroads are relieved to haul two additional cars of men or munitions.

During the years when the painstaking efforts of power engineers were producing this result, Combustion Engineering was privileged to work in close collaboration with many of the country's leading utilities in designing and building hundreds of steam generating units that today are helping the utilities to meet the nation's vast electrical demand, and with two-thirds less coal.

*National Average of the Federal Power Commission for the years 1920 and 1941 respectively.

combustion engineering company inc.

200 MADISON AVENUE, NEW YORK, N. Y.

resent, but they almost invariably do. There's an added wallop when the hostess pats her own neat wave as she talks about the beauty shop client whom she represents.

Welcome Wagon's clients pay on a per call basis furnishing, in addition, a gift for the hostesses' basket. The amount of the charge depends on the

type of business. A dairy, or laundry, for example, pays more than a business which requires less service.

Checkbacks on one product (Armour's Vegetole Shortening) in 15 Southern towns showed that the percentage of use among housewives originally contacted by Welcome Wagon's hostesses ranged from a high of 85% in one town to a low of 63% in another. Again, Welcome Wagon cites the finding of the American Institute of Laundering that it costs a laundry an average of \$12.20 to get a new customer. This is compared with the cost to a typical Welcome Wagon laundry client of \$1.95 for each customer brought in.

• Complete Service—From each house-

wife visited the Welcome Wagon hostess extracts, as a matter of routine, information on her husband's business, the family's church affiliation, whether she employs a maid, whether the home is rented or owned, furnished or unfurnished, the make and age of the family car, the names and ages of her children. She keeps this in her head until she gets outside the house, then writes it up on a report form for all her clients. In addition, she secures information of interest to individual clients. A fuel company will be told whether the home is heated by coal or oil, for example, whether the heater is old or new. Welcome Wagon supplies clients with form letters and complete campaigns for following up these leads.

Hostesses concentrate on upper and middle income families, pick their rent districts carefully. They strike while the iron is hot. It's not uncommon for a hostess to spot a moving van as she drives down the street and trail it to its destination. Brides are visited as soon as they get back from their honeymoons, new mothers immediately on their return from the hospital, or—a practice which some hospitals permit and encourage—while they are still there.

• Good Money for Hostesses—Welcome Wagon hostesses are paid a per-call commission with a bonus for each new client brought in. Hostesses' incomes are reported to run from \$65 to \$250 a month, depending on the size of their community, and a good many boast earnings of \$400 or \$500 a month.

The company is still nominally headquartered in Memphis, although New York is the principal business office. Welcome Wagon's biggest potential problem today is the rubber shortage. Thus far, this has not affected the company seriously, since most hostesses have relatively new cars and tires which are good for thousands of miles yet. But in one North Carolina town the hostess makes her calls with a horse and buggy, and hostesses in a couple of other communities have started using bicycles.

ADVICE ON MOTORS

Round-the-clock operations have tripled or quadrupled the working hours of electric motors in factory production jobs, have similarly multiplied the need for inspection, adjustment, and lubrication. This pressure, combined with plant expansions and the loss of old-timers, has placed in crucial maintenance positions many men lacking adequate experience.

To help management break in the tyro maintenance electrician on one of the most ticklish parts of his job, where a major error causes damage to equipment that may now be extremely hard to replace, Allis-Chalmers Mfg. Co. is this week publishing, "A Guide to Wartime Care of Electric Motors."

CAN YOU BUILD MACHINERY?

A prominent manufacturer of large machinery is in a position to subcontract units weighing from 5 to 10, or 20 tons. If you have accurate turning equipment, (14-24"); planing equipment (48" or larger); horizontal boring machines; plain cylindrical grinders; etc., etc., as well as experienced fitting and assembling gang, communicate with

CW-321, Business Week
520 No. Michigan Ave., Chicago, Ill.

BAKER TRUCKS



1. HANDLING MATERIAL FASTER

Saving man-hours means saving man-power. Baker Trucks cut time on handling operations.

2. HANDLING BIGGER LOADS

Baker Trucks, carrying pallet or skid-loads, eliminate piece handling, and release man-power for other work.

3. USING FEWER MEN FOR SAME JOBS

One man with a Baker Truck can do the work of many men with hand trucks.

4. GETTING MORE OUT OF SKILLED LABOR

Cutting idle time of machines by servicing them with Baker Trucks conserves skilled labor.

5. CUTTING WASTE TIME

Waiting for material wastes man-power. Baker Trucks move material where needed, when needed.

6. DISPOSITION OF SCRAP

Keeping aisles clear and handling scrap efficiently with Baker Trucks saves man-hours.

THE BAKER MATERIAL HANDLING ENGINEER CAN HELP YOU

He is a specialist and knows how to get the most out of material handling to conserve man-power. He is at your service.

BAKER INDUSTRIAL TRUCK DIVISION
of The Baker-Raulang Company

2164 W. 25th Street • Cleveland, Ohio



Baker INDUSTRIAL TRUCKS

In Canada: Railway and Power Engineering Corporation, Ltd.

LABOR

Tobin Snaps Whip

Teamster boss tells locals rough-house stuff is out. Drive aimed at high initiation fees and sympathy-strike abuses.

Few labor unions have achieved the reputation for direct action which the A.F.L. International Brotherhood of Teamsters has earned with its rough-house tactics on the picket line, its impudence at the bargaining table, the frequent defiance or circumvention of the courts by some of its locals.

• **Tightening Up**—Under the impulse of an all-out war program, the I.B.T. is showing signs of tightening up on the locals which in years gone by were allowed to believe that dumping "scab" trucks in the river and sugaring the fuel tank were legitimate picketing weapons. Such a local was Pittsburgh General Teamsters' Local 249, a powerful band of 5,000 men whose proud boast was that not even I.B.T.'s International president, Dan Tobin himself, dared interfere with them.

President Tobin called their bluff this month with a stinging rebuke for a two-day sympathy strike with which Local 249 bottled up the entire supply system of all A. and P. food stores in Pittsburgh (BW—Jun. 27'42, p. 72). The rebuke was one of seven articles in the July issue of *The International Teamster* concerning out-of-bounds activities of local unions, officers, and international organizers as seen through the critical editorial eyes of a man who finds it "awful even to think about" the future of American workers if the war goes the wrong way.

• **Rubber a Factor**—Another thing which shortens Tobin's temper is the rubber shortage. He can look forward to widespread layoffs with attendant loss of union revenues as the war continues. A wartime reorganization of transport may leave I.B.T. high and dry. The trucking czar wants to have his internal situation straightened out so that he can trim to the wind without any loss of time, or local obstruction.

Officers of Local 249 were "instructed" to put the A. and P. drivers back to work but "apparently were not strong enough or influential enough to enforce the order immediately," said the magazine which Mr. Tobin edits. General Organizer Edward Murphy had to hot-foot from Cleveland to break the strike and reopen the food stores. The article took pains to point out that such derelictions by local officers are punishable by expulsion, but it failed to con-

PROMPT SHIPMENT on priority orders

Many large size Air Compressors are available only on *allocation*. If the Compressor your plant requires comes under that classification, consider using two or more Quincy Compressors to produce the required air supply. Quincy Compressors range in size from 1 to 80 c.f.m. displacement and can be delivered on *priority*. The Quincy Compressor Co. builds air compressors *exclusively*. Ask Quincy Specialists to help with your compressed air problems.



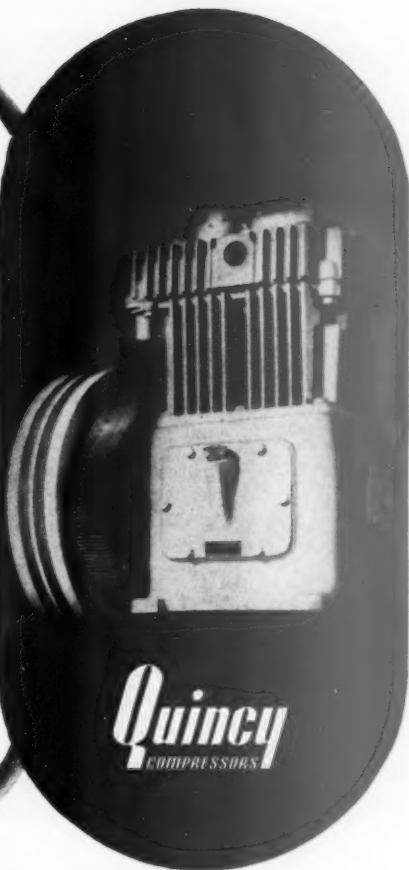
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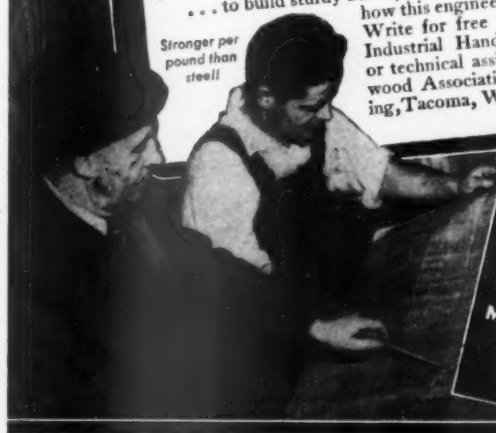
Perhaps Douglas Fir Plywood can be of service to you!

• If your war production is being slowed down by unavailable or hard-to-work materials, let versatile Douglas Fir Plywood pinch hit for them. Its large sizes, amazing strength, light weight, easy workability, durability, split-proofness and other advantages are helping scores of industries speed up their schedules while turning out definitely superior products.

Douglas Fir Plywood is also being used extensively to provide housing for workers and to construct plant additions in a hurry . . . to build sturdy boxes, crates, boats and planes. Investigate how this engineered lumber can serve you.

Stronger per pound than steel

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Real Lumber
MADE LARGER, LIGHTER
SPLIT-PROOF
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When men are lost in the daring raids of the Commandos, others of equal valor take their places. Whiting Victory Cranes, too, are organized to win—designed so that construction may be changed without affecting efficiency.



Order a **WHITING VICTORY CRANE**

Whiting has designed the Victory Crane for speed in handling the huge volume of materials used in war production. It is carefully engineered to do its required task . . . every essential advantage of Whiting construction has been fully retained . . . but there are no "frills" or "furbelows."

You will receive the same smooth performance and dependable low-cost operation which Whiting has guaranteed for over fifty years—PLUS delivery at the earliest possible moment. Whiting Corporation, 15661 Lathrop Avenue, Harvey, Illinois.



BUILDERS OF QUALITY CRANES FOR OVER 50 YEARS

WHITING

CORPORATION

Quiet-Running OVERHEAD TRAVELING CRANES

firm reports that Local 249 officers were called on the carpet before the general executive board meeting in Atlantic City last month.

• **Then and Now**—Only a year ago (BW—Jul. 5 '41, p. 35) the same local cheerfully thumbed its nose at Tobin when he promised President Roosevelt to go to Pittsburgh and end a strike of 1,700 motor freight drivers which had all but isolated the city. Tobin didn't go to Pittsburgh and the strike lasted four weeks. Instead of striking this year at the expiration of their contract, the motor freight drivers have laid their rejected wage demands before the National War Labor Board.

That the war is responsible for much of the I.B.T.'s change of pace is obvious from Tobin's recent declarations on the rubber and gasoline shortages. There is also the possibility that his White House contracts have added a luster of labor statesmanship to his outlook. (Tobin is a member of the joint A.F.L.-C.I.O. Labor Victory Board.) The Washington influence was apparent in the headline he chose for the Local 249 article: "F.B.I. May Investigate Strike."

• **In the Pegler Manner**—So emphatic were some of the articles in the crime-must-go vein that they might have been selected from the news budget by Westbrook Pegler. One praised the Massachusetts Supreme Court for sustaining the I.B.T.'s ouster of the "boss" of Boston Newspaper Drivers' Local 259, who had been too liberal with the union's money. Another, "Jerry Buckley Takes a Ride," hailed the conviction of a Yonkers, N. Y., Local 455 official for a shakedown on milk trucks.

Another termed "Internal Strikes Inexcusable" and still another reported the I.B.T. executive board's ceiling of \$10 on initiation fees and \$2 a month on dues for new members on war work.

The June issue featured articles titled, "Criminals Must Be Expelled," and "Go Through Those Picket Lines!" The latter was a signed complaint against abuse of the sympathy-strike weapon for the furtherance of an "organizing racket."

• **Trading Favors**—Teamster big-wigs have always felt that local units were patsies for other unions. If any group of strikers could get teamster support it meant that a struck plant got nothing hauled in or out on rubber. Local leaders, on the other hand, were often glad to dispense such favors. It put other unions under obligation to them, paid off in political and, sometimes, financial ways.

Each of the Tobin-sponsored articles deals with a phase of labor union activity which critics have been condemning in less forceful language for five years. Tobin could cite in his own organization, if he chose, a local (Pittsburgh Newspaper Drivers' Local 211)

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which makes no secret of its \$500 initiation fees; and he could cite chapter and verse from his own files to illustrate each of the other points.

• **Without a Ceiling**—I.B.T. initiation fees know no constitutional ceiling. The constitution permits locals to charge whatever the traffic will bear, stipulating only that the international union receive \$1 of all initiations under \$25 and a straight 10 per cent of those over that figure. Although locals may set the rate higher, they may not charge less than \$2 a month for dues.

In his injunction to his members to "go through those picket lines," Tobin said, that business agents "who are not strong enough to tell their members to go through—and make them go through—should get out of the union," and that members who disobey "should be suspended or expelled."

• **Rules Changed**—With a stroke of the pen he set aside for the duration those contract clauses which permit locals to refuse deliveries and pickups at places where labor trouble exists.

"If you can't comply with our international orders, which are founded on necessity and on orders from our government, then the best thing to do is to notify the international union," he fumed.

For members convicted of "grafting or racketeering," Tobin demanded immediate expulsion even though appeals are taken to higher courts. The I.B.T. chief said, "When he (a member) is found guilty in the lower courts we have to assume that he is guilty. That is his lookout."

• **New Attitude**—Until the seriousness of the tire and gasoline shortage became apparent, Tobin objected bitterly to any rationing that would jeopardize the jobs of his drivers. Now he is convinced that "100,000 members of our trade (equivalent to about one-fourth of his membership) will be out of work within the next year" and seems reconciled to it.

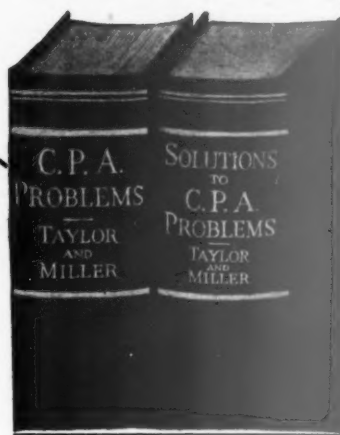
The Pittsburgh newspaper drivers aren't certain his advice is worth taking without a fight. The Pittsburgh Press laid off 14 of its 80 drivers last month when ODT regulations forced a curtailment of editions and consolidation of delivery runs to conserve tires.

• **Half-Day Strike**—The drivers staged a half-day strike and climbed back into their trucks only when assured that the 14 would receive full pay while their dismissal grievance was under consideration. (When one of the 14 was directed to substitute for an absent driver, the union steward required the paper to engage a third man to loaf for the substitute.)

A written but unsigned agreement last week that the main point at issue be arbitrated was repudiated by Press drivers last Saturday and they struck on nine hours' notice, demanding an un-

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Send me Taylor and Miller's C.P.A. Problems and Solutions to C.P.A. Problems, 2 vols., for 10 days' examination on approval. In 10 days I will send \$1.00, plus few cents postage, and \$3.00 monthly for 3 months, or return books postpaid. (Postage paid on orders accompanied by remittance of first installment.)

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Company HW-7-18-42

How to buy a Chain Link Fence



1. Call a Wickwire Spencer Chain Link Fence representative (classified phone book or letter to us).
2. Seasoned fencing engineer will study your property, ground conditions, grades, etc.—then specify to your own special needs.
3. Get a quality-controlled fence, made entirely by one company, from open hearth furnace to delivered product.

For protection, for long-time investment, write Fence Division, Wickwire Spencer Steel Company, Rand Building, Buffalo, New York.



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• **EXPERIENCED BUSINESS EXECUTIVE**, formerly President munitions plant, newspaper publisher, specialist public relations, exceptional Washington entre, highest references, desires mutually advantageous connection. Box 299.

• **EXECUTIVES EARNING \$25,000 up** apply to Box 300 for experienced male secretary, Graduate School of Business degree, C.P.A., age 27, deferred, no dependents.

special services

• **IN SOUTH AMERICA**. Industrial Consulting Eng'r. Appraisals. Factory planning, organization. Local negotiations, purchases. 5 years chief engineer Fabrica Argentina de Alpagatas. D. B. Parsons, Bme Mitre 341, Buenos Aires.

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• **OLDEST ESTABLISHED** pattern and machine works on Long Island can take on additional wood and metal pattern work. Eppenbach, Inc., 4510 Vernon Blvd., Long Island City, N. Y.

management course

• **COMPLETE COURSE** in business management helps executives know business functionally outside their own department. Invaluable for answers to questions of analysis, planning, methods, control; price only \$15. Write for details. Box 287.

"clues" information

"clues" appears weekly. Copy required Monday for Saturday's issue. Rate 50 cents per word or \$2.50 per line (or fraction) per insertion, payable in advance. Minimum charge \$5.00. Discount 10% on orders for insertion in 4 consecutive issues. Publication box number address counts as 2 words; replies forwarded without charge. Address replies c/o Business Week, 330 W. 42nd St., New York, N. Y.

COPY required August 3 for issue of the 8th.

qualified commitment "that the 14 drivers remain on their jobs for the duration of the war." Pressure from all the other A.F.L. craft unions in the plant, the U. S. Labor Conciliation Service, and Teamsters' international headquarters ended the five-hour strike after three Sunday editions had been missed. The status of the 14 drivers is subject to further negotiation.

OPA On Wages

Price-fixers hand West Coast stabilization meeting a definition of policy that curbs labor—if F.D.R. backs it.

The West Coast's full-dress conference on wage stabilization in the airframe industry spent its first week deadlocked by management's demand that the federal government give the meeting a definition of policy to guide it. This week, as the conferees reassembled at the Hollywood-Roosevelt Hotel, they got the definition in an OPA manifesto that cut the props out from under labor representatives' demands—provided the OPA policy has full backing in high places in Washington.

• **Getting Down to Cases**—Here was the sequence of events:

(1) A joint program of A.F.L.-C.I.O. delegates demanded, among other

things: Wage increases that management estimated would roll up to \$162,000,000 a year; overtime pay consistent with the policy of C.I.O.'s United Automobile Workers (BW-May 28 '42, p. 70); security for new employees; paid vacations, or bonuses in lieu of vacations; that the problem be approached on the basis of national labor needs, but that agreements apply only to West Coast plants. The demands were postulated on the statement that workers looked to the conference "for relief from substandard wages."

(2) Management looked over labor's demands and countered with a declaration that it couldn't even attempt to outline its position until Washington answered three questions:

Are wages in Pacific Coast airframe plants substandard?

What is the definition of wage inequalities?

What adjustments in wages, if any, will the government sanction to achieve the objectives of this conference within the limits of the anti-inflation program?

(3) To the first question, OPA answered with a flat, "No." Just how hard it smacked labor down on the other two is a matter of opinion, depending on the implications any partisan reads into the statement of OPA Deputy Richard Gilbert.

• **Industry Not Substandard**—Gilbert warned that war shortages will force the United States' standard of living down to levels lower than those at the bottom



BACK HOME

When Seaman William Nason visited the Gary Works of the Carnegie-Illinois Steel Corp. to commend workmen in the 160-in. plate mill on

behalf of the Navy for their production record, his words bore added weight, for not only was he a former employee, but he had also been their union shop steward before entering the Navy.

of the depression, that anyone now making more than a bare subsistence income may expect to feel the over-all curtailment. He declared that airframe industry pay is "above the average in this area and in the country as a whole" and consequently the industry "can scarcely be considered substandard."

On the subject of inequalities, he set forth a five-point set of measurements: Differences between comparable jobs in the same plant, differences between comparable jobs in different industries in the same region, geographical variations in the cost of living, variations in conditions of work including housing, etc., and health and safety conditions.

• **Burden of Proof**—"Wage stabilization," he continued, "means no wage increases except to eliminate inequalities and substandards of living. The government will require that compelling evidence be produced before assenting to any increases."

Thus was the burden of proof shifted to the aircraft unions, even though the specific interpretations asked by management may not have been given in complete detail. Immediately word got about that the statement had the approval of OPA, WPB, the War Manpower Commission, and of the Army and the Navy; if it has—and if it gets some help from the White House and the National War Labor Board—then observers are convinced that wage stabilization policy has been set for the duration.

• **Wage Demands Poorly Received**—Earlier in the discussions there hadn't been too much indication of such unanimity of opinion among Administration leaders. There was, however, every indication that the government was not in sympathy with wage increases as large as the C.I.O.-A.F.L. representatives asked: A minimum of \$1.35 an hour and a maximum of \$1.60 for skilled workers, 95¢ to \$1.35 an hour for semiskilled workers, and 95¢ to \$1.15 for unskilled.

Opening the conference for WPB, Wendell Lund, director of the Labor Production Division, asserted stabilization was a keystone of success in the war effort, that standardization doesn't mean freezing, that the government doesn't intend to achieve that goal by edict.

• **"Escalator Clause" Barred**—Then Lund dashed back to Washington, turning the meeting over to the chairmanship of Paul R. Porter, stabilization expert (BW—May 9 '42, p7) for the Labor Production Division. Porter echoed his chief's sentiments, declaring that the government didn't call the conference to force any preconceived program on management and labor. As last week closed, however, he classified the unions' demands as inconsistent with the President's seven-point anti-inflation program. He also barred any "escalator clause" that would tie wages to the cost-of-living index.

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THE MARKETS

Optimism paid off this week when the stock market hauled itself up to the highest close of the recovery. Apparently Wall Street is taking the inflation talk pretty seriously. There is nothing in current earnings reports or in the tax news to make traders cheerful.

● **A Few Surprises**—Second quarter earnings reports are just beginning to trickle in, and the market is looking them over eagerly. On the basis of early statements, it looks as though June quarter earnings will repeat the now familiar story—income before taxes higher; income after taxes sharply lower. A few companies, however, show a surprising shrinkage in net income before taxes.

Underwood Elliott Fisher reports an income before taxes of \$1,373,000 in the second quarter; last year it made \$1,541,000 in the same period. Deducting taxes, the net for the quarter just ended is \$243,000; in 1941 it was \$988,000.

● **Typical Results**—Mathieson Alkali Works gave the market an unpleasant moment by reporting that its per share earnings dropped from 66¢ in the June quarter of 1941 to a scant 20¢ this year. American Telephone and Telegraph, always a favorite of the market, showed an income of \$44,352,000 (not including undivided profits or deficits of subsidiaries) for the quarter. This compares with \$48,847,000 a year ago.

Until Congress makes up its mind about the 1942 tax bill, all estimates of quarterly earnings will be based on guesswork. Companies have followed widely different policies in setting up reserves for current taxes.

● **Dividends at Stake**—A. T. and T., for instance, accrued taxes on the basis of 1941 rates. This means that its tax

reserves for the first six months of this year are almost certain to turn out too low. That is bad news for 634,000 stockholders who are praying that A. T. and T. can maintain its regular \$9 annual dividend.

Last minute changes in the Ways and Means Committee tax bill (page 17) spoiled the weekend for many traders. Raising the corporate surtax another 5% will bear down hard on companies which have not benefited greatly from war production. Banks are particularly annoyed by the new proposal. A large part of the income from their bulging portfolios of government securities is exempt from normal taxes but subject to surtax.

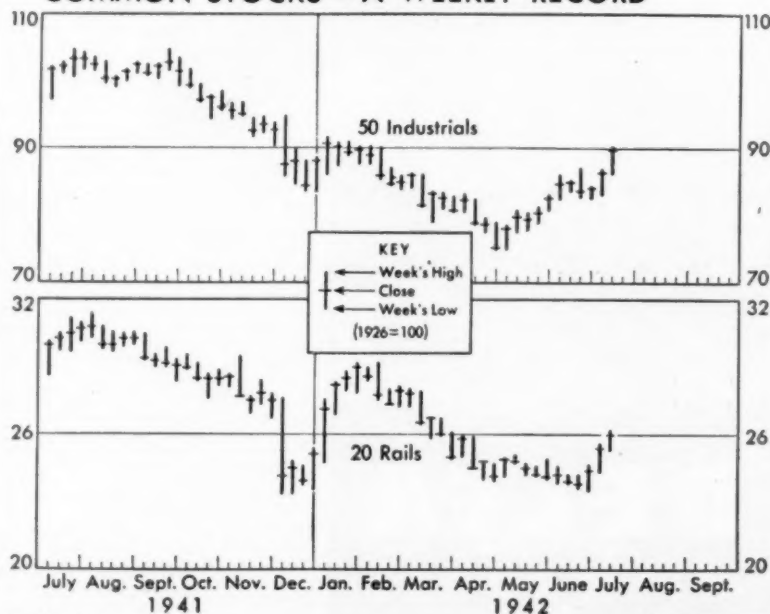
● **Now or Later?**—Changes in the excess profits tax caused less concern. Abolishing the provision for a postwar refund of 14% means that many corporations will have smaller incomes in the long run, but cutting the rate from 94% to 87.5% largely offset this. Many companies would rather have a 6.5% bird in the hand than a 14% rebate sometime in the distant future.

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial ...	89.8	86.5	85.0	102.3
Railroad	26.0	25.4	23.9	30.3
Utility	31.0	30.4	31.5	45.9
Bonds				
Industrial ...	108.4	107.8	107.9	104.9
Railroad	84.1	83.8	82.3	88.2
Utility	104.5	104.9	103.1	107.2
U. S. Govt....	110.8	110.8	110.9	112.0

Data: Standard & Poor's Corp. except for government bonds which are from the Federal Reserve Bank of New York.

COMMON STOCKS — A WEEKLY RECORD



Data: Standard & Poor's Corp.

© BUSINESS WEEK

FINANCE

Credit, Not Relief

Nelson warns that loans from Smaller War Plants Corp. won't be any panacea as agency gets set for business.

The Smaller War Plants Corp. would like to open for business without fanfare. Afraid that it will be swamped at the outset with requests for war contracts and loans that it will be unable to handle promptly, the corporation expects more brickbats than bouquets.

● **See Your Local Office**—Everybody who wants SWPC's help in lining up war business and obtaining credit to make the shift is urged by Donald Nelson not to come to Washington but to contact any one of the War Production Board's 13 regional offices or 120 local offices.

The Smaller War Plants Corp. is the culmination of long months of haphazard efforts by Congress to take care of "little business" which has had the props knocked from under it by the war production program. The law (Public Law 603, approved June 11) is significant principally as an injunction by a bewildered, resentful Congress that the war agencies do something—anything—to give small concerns a larger slice of war business.

● **Political Talking Point**—All congressmen want to be able to say to hard-pressed, disgruntled constituents: "We have done our part; now it's up to Don Nelson and the Smaller War Plants Corp.—and the \$150,000,000 which we gave them—to take care of fellows just like you."

In and of itself, the corporation can do little or nothing for thousands of the concerns which are being stood against the wall by the war. To start with, SWPC has only that \$150,000,000.

● **Turnover Won't Be Fast**—Congress may give out more if SWPC wins its goodwill by good works, but the original fund won't go far toward enabling the corporation to operate as a prime contractor—taking on prime contracts from the Army and Navy and breaking them down into subcontracts for distribution among smaller concerns.

Loans made by SWPC to help would-be contractors and subcontractors to convert their plants also must come out of the \$150,000,000. There probably will be enough to take care of those concerns which, for one reason or another, haven't been able to obtain credit through arrangements now pretty well organized.

● **Slap at Jesse Jones**—To the extent that SWPC can cover the wide field repre-

sented by disabled civilian business—the injured noncombatants who would like to get into the war program—the corporation's great utility lies in its power to act when the contract-letting and financing agencies won't. The corporation's power to make direct loans is a butt under Jesse Jone's loan department.

The Army and Navy are put under heavy pressure to spread business more widely. SWPC's law requires that, in any case in which a small concern or group of concerns is certified as to capacity or credit by WPB to be a competent government contractor for a specific job, the procurement officers of the Army, Navy, and other government agencies are directed to accept such certification as conclusive and are authorized to let the contract without any more ifs, ands, and buts.

● **Not Compulsory, But**—This provision doesn't make it compulsory on the Army or Navy to award the contract to the concern SWPC certifies but, practically, the law has that effect as, on Nelson's certification, the Army, Navy, and other procurement agencies must hand over the contract to SWPC whenever it elects to step in and farm out the job on subcontracts.

SWPC has a definite responsibility, however, in certifying to the competency of potential contractors and also in assuring itself on this score in making loans to potential contractors and subcontractors. It's not just a business of shuffling a bunch of contracts and dealing them out face down.

● **Distribution Isn't Easy**—The narrow distribution of contracts and subcontracts hasn't been due entirely to lack of enthusiasm by the Army and Navy for entrusting its work to a large number of small concerns. Fully 80% of the job of lining up either a prime contract or a subcontract rests on the initiative of the chap who claims to want the business, according to a rather disillusioned official of the WPB's Contract Distribution Branch which, incidentally, will be liquidated as soon as SWPC takes over.

Bringing prime contractors and subcontractors together and converting shops necessarily must be on a job basis. Frequently the shop may lack a necessary machine that won't be any easier to get now than it has been in the past.

● **Passing Out Easy Jobs**—Earmarking comparatively simple items for manufacture by small plants will help to distribute business. This isn't new practice but SWPC intends to push further in that direction. The corporation also will give aid, both financial and engineering, to shop pools.

Much more hope for the small shop which is trying to keep its head above water may lie in shifting from nonessential to essential civilian goods than in shifting to war items. Donald Nelson has laid this down as one of the policies to guide SWPC's operations. In our

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war program, he says, we can't make a sharp distinction between military and civilian production. The distinction rather is between goods which must be produced in a total war economy and goods which such an economy can get along without.

● **Reasons Behind the Plan**—A continuing supply of many lines of civilian goods obviously will be necessary through the war. In manufacture of civilian goods, specifications are not, by and large, as exacting as in war goods. Tolerances need not be as close and substitutions of materials can be resorted to more freely.

The membership of SWPC's board of directors, selected by Nelson, includes seasoned men who know what it takes to line up a war job for their shops or for a pool. Lou E. Holland, Nelson's deputy chairman on SWPC, is a pioneer in plant pooling.

● **Other Personnel**—William S. Shipley, board chairman of York Ice Machinery, was a moving spirit in the York plan, another early war work pool (BW—Sep. 28'40,p16). James T. Howington of Louisville, left a vice-president's job in the Girdler Corp. last September to become district manager of WPB's field office in his home city. Albert M. Carter is a small town banker from Murphysboro, Ill., and president of a small kaolin mining company near Anna, Ill. Samuel A. Smith was president of the Thomas Strahan Co., a wall paper manufacturing firm in Chelsea, Mass., and vice-president of the active Smaller Business Men's Association of New England.

In announcing this slate of appointments, Nelson expressed confidence that SWPC will perform an extremely useful function. He warned, however, that neither the corporation nor the law under which it will operate will be a panacea for all the problems of small business men.

"It is unfortunately very likely that the number of small business firms which we can help will be smaller than the number we cannot help," says Nelson, bluntly. "We are fighting a war and WPB is a war agency. As far as the placement of war orders is concerned, the controlling factor must be the ability of the manufacturer to deliver what the Army and Navy want, when they want it, according to their specifications.

"What we have in the Smaller War Plants Corp. is a mechanism to help us increase the total quantity of essential goods needed in this war, rather than a relief agency. If it should unfortunately develop that outright relief measures for small business are necessary, it must be realized that a mechanism other than the SWPC must be found for extending such relief."

In that last sentence, the WPB chief very neatly tells Congress that if it thought it was passing the buck to him, it was very much mistaken.

THE TRADING POST

Lowdown on Rubber

The following letter from Citizen A to Citizen B on a subject of widespread interest, seems to speak for itself:

I have been doing a lot of reading about rubber of late and I wonder whether the public is as confused as I am and whether the experts on the subject are as mixed up as they sound. I will here reduce my impressions on this question to the following simple statements, so as to permit you to fog yourself up properly and be in position to add to the mental murkiness that seems to be needed in the war effort.

1. The rubber stockpile has all but disappeared and under the lend-lease program we have just enough left to supply three spare tires to El Salvador, with maybe one rubber garment for Mohandas Gandhi.

2. We have plenty of rubber in the stockpile to take care of all the military needs for two years and by that time there will be enough synthetic product to get all the cars back on the highways.

3. There is very little rubber in the country that can be reclaimed, with the exception of anywhere from five to fifty million tons lying around all over the place, all of which could be made into new tires and into recap material, either of which is not worth having or is superior to fresh rubber, depending on who is telling the story.

4. Rubber can be made out of practically anything, of which we have plenty. A man in Brisket, Vermont, made some out of a tubful of potato peelings and apple cores, using Epsom salts as a catalyst. Anyway, he said he did, and got his picture in the paper, followed by an interview from Washington with two Ph.D.s and an OFF denying that it was possible to make rubber out of such trash. Other stories have built up a potential plethora of rubber substitute made of whatever was left over from the Sunday dinner, from goats' milk and from curlew eggs.

5. There is a vast reserve of rubber to be made from guayule, which is being held back because few can pronounce the word. Rabbit brush, milkweed, hedge apples, per-simmons gathered in the dark of the moon under the zodiacal sign of Scorpio, after the first frost, are some other sources. The rubber trust is interfering with such production.

6. There is an inventor, probably Portuguese, maybe Latvian, whose name is either Tamulapius or Frobisher, who has a highly guarded formula for making rubber out of water. He has appeared in several towns and has exhibited proof of his research in the form of a small ball, with dimpled cover, on which is stenciled the word, "Acushnet." Philologists have been unable to supply a translation and it is supposed that the word is the shibboleth of a mystic cult, or part of a college yell. This inventor always disappears after each interview and bobs up several hundred miles away. It is supposed that he is subject to espionage and counter-espionage, and even counter-clockwise spying, by the Gestapo, GPU and a man named Gus.

7. Rubber can be made from petroleum. It is being so made. There are many formulas for this. Any household that has a few

barrels of butadiene and a crock of styrene can make its own tires. For home cooking, the best recipe is two parts buta, etc., one part styrene and five parts RFC loan.

8. Care of tires. There are two schools of thought. One holds to the theory that it is best to use them carefully and make them last and another is that we should use them up as quickly as possible and add to the reclaimed rubber supply. A new board is being appointed to survey both theories. It will be known as the ÖGG—Office of Guessing Games.

The foregoing should fix you up nicely with enough garbled data to enable you to supply answers to questioners in the same way that everyone now is being informed, provided he reads faithfully all that is being printed on the subject of rubber.

My own idea is that the quickest way to get our rubber supply up to normal is to lick the Japs.

First Aid to Salesmen

A lot of people are beginning to feel very sorry for themselves because of what the war is doing to their businesses and their jobs. Many of them are quite justified too. And more will be.

But taken as a class, it is the salesmen, I suppose, who actually are the hardest hit. Many of them in the field of machinery and other heavy goods have been used by their companies in other jobs whereby they can earn their keep and the company can keep its sales organization together. But those in the consumer fields are not so fortunate.

That is why the Sales Managers Bureau of the St. Louis Chamber of Commerce deserves a hand. On the job as usual, the Bureau has not missed its signals in this salesman's emergency. It has set up a placement service for its members and is using all its resources to find the right spots for the men whose jobs have been sacrificed to the war effort.

Already the service has made a good record of performance and has had many inquiries from other cities in this country and Canada as to its set-up and methods.

There are going to be many "war casualties" besides those on the battlefields, and a lot of them will be salesmen. And no one should know better than the local sales managers how to take care of these in their own communities. Incidentally, no one has any greater practical interest in taking care of them.

There's a lot of high-grade, hard-hitting manpower in the American sales force and our Uncle Sam needs it in some form or other. So the Bureau, in this undertaking, is not only rendering a practical service to its members—it is at the same time performing a patriotic duty.

W.C.

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THE TREND

CALL IT "WAR AS USUAL"

Three battles on the home front of the war concern business this week. Perhaps the first sound thing to be done about them is to drop the overworked word "battle" and call them "three traditional problems of wartime adjustment." They have confronted every nation in every modern war and we'll be better off if we avoid dramatizing our discovery that they confront us in this war.

• One is the problem of striking a balance between the military and civilian war leadership (Washington Bulletin). It has come to the front so early in this conflict that we may, at least, be hopeful of an early solution. Better a sharp showdown now than months of watching the men in and out of uniform taking false steps on each others' toes.

For business and the general public, the considerations fundamental to a solution are those expressed by Donald Nelson at last week's meeting of the Automotive Council for War Production:

That in an all-out effort we cannot make a distinction between civilian and military production. The military effort rests upon the civilian effort. If we should pare down our civilian economy too fine, in our effort to put every possible bit of strength into war production, we should run straight into disaster. The distinction is not between civilian and military production, but between the production which we can get along without in a total war effort and the production which we cannot get along without.

That the armed services, of course, must determine what their own productive requirements are. They determine the kinds and quantities of arms and munitions they need, and they determine when and where those articles must be delivered. If there is a question as to whether this particular kind of military item is needed ahead of that particular kind, this must be settled by military men.

That, when these determinations have been made, the direction of the national economy as a whole must rest in civilian hands. It must, in other words, be controlled by someone who is not too close to any one part of the picture but that he can see the picture as a whole.

• With these statements of principle Nelson coupled another in the warning that "our civilian economy for the rest of the war will operate at an efficiency level and no higher. By that I mean that we shall produce for it those things, and only those things, which we must have in order to get maximum productivity and efficiency out of our national plant. We are going to get along without things, as individuals, and adjust ourselves to the second best, and make old things do, as we have never done before in our lives."

If our civilian leaders stick to and get public support for that principle, it is safe to predict that this traditional

problem of wartime adjustment will be settled with military and civilian leaders arriving at a *modus vivendi*. In the long run, it depends on the rest of us whether their tug of war—which is not without its healthy aspects—does more than to keep both sides on their toes.

Another problem is that of striking a balance between national interests, as represented by governmental administrators of wartime regulations affecting civilian life, and group interests, as represented by political legislators. This perennial problem is epitomized in the struggle between Price Administrator Henderson and Congress—a type of wartime struggle that is as old as war and as certain to be settled on the basis of events on the battlefield. The issue at bottom is whether we are to have inflation-control or whether we are just going to play at it and, if we are any prophet, the course of events is bound to run in Henderson's favor, though the inevitable effects of those events may be postponed for a period of pre-election political posturing.

But the odds in favor of eventual toughness are no excuse for lack of present toughness in criticizing the political posturing and group shortsightedness. We may "have to go through this stage of shilly-shallying," but articulate protest can do something to shorten it. When the inventories run down and the shortages mount up next winter, we'll appreciate the value of every day that has been gained by a quick affirmative answer to Henderson's always undiplomatic "Eventually, why not now?"

• Our slowness to handle this situation is partly due to the same trouble that besets us in dealing with the third "problem of wartime adjustment"—the problem of adjusting labor's normal course to wartime conditions that has just been highlighted by the Little Steel case. That trouble is defined by what Nelson calls "the need to see the picture as a whole." It afflicts labor leaders who think of standards of living as usual and of wage increases normal to a period of rising production. But it also afflicts the compartmented gentlemen in Washington labor agencies who compromise labor disputes in the name of "realism," while, in reality, compromising, in a different sense, both the anti-inflation campaign and our job of mobilizing manpower for war (BW—Jun. 6'42, p76).

• The prevailing trend is toward realism, to be sure—and there has been too little realism in our consideration of labor problems—but labor, like the New Deal, has new bases for its understanding of realism. Total war calls for total thinking, for thinking about inflation spirals as well as of wage rises—about the stark meaning of Nelson's statement that "our civilian economy for the rest of this war will operate at an efficiency level and no higher."

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